Welcome to STN International! Enter x:x

LOGINID:ssspta1600rxa

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	Apr 08	"Ask CAS" for self-help around the clock
NEWS 3	Apr 09	BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 4	Apr 09	ZDB will be removed from STN
NEWS 5	Apr 19	US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 6	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 7	Apr 22	BIOSIS Gene Names now available in TOXCENTER
NEWS 8	Apr 22	Federal Research in Progress (FEDRIP) now available
NEWS 9	Jun 03	New e-mail delivery for search results now available
NEWS 10	Jun 10	MEDLINE Reload
NEWS 11	Jun 10	PCTFULL has been reloaded
NEWS 12	Jul 02	FOREGE no longer contains STANDARDS file segment
NEWS 13	Jul 22	USAN to be reloaded July 28, 2002; saved answer sets no longer valid
NEWS 14	Jul 29	Enhanced polymer searching in REGISTRY
NEWS 15	Jul 30	NETFIRST to be removed from STN
NEWS 16	Aug 08	CANCERLIT reload
NEWS 17	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18	Aug 08	NTIS has been reloaded and enhanced
NEWS 19	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS 20	Aug 19	IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21	Aug 19	The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22	Aug 26	Sequence searching in REGISTRY enhanced
NEWS 23	Sep 03	JAPIO has been reloaded and enhanced

NEWS EXPRESS	February 1 CURRENT WINDOWS VERSION IS V6.0d, CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP), AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

Examiner Anderson 703-605-1157

FILE 'HOME' ENTERED AT 11:46:17 ON 09 SEP 2002

=> fil casreact

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CASREACT' ENTERED AT 11:46:28 ON 09 SEP 2002

FILE CONTENT:1974 - 8 Sep 2002 VOL 137 ISS 10

Some records from 1974 to 1991 are derived from the ZIC/VINITI data file and provided by InfoChem.

This file contains CAS Registry Numbers for easy and accurate substance identification.

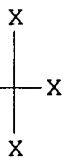
Crossover limits have been increased. See HELP RNCROSSOVER for details.

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=>
Uploading 09961347b.str

L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1 STR



G1 O,S,Po,Se,Te

Structure attributes must be viewed using STN Express query preparation.

=> s l1
SAMPLE SEARCH INITIATED 11:46:46 FILE 'CASREACT'
SCREENING COMPLETE - 13472 REACTIONS TO VERIFY FROM 672 DOCUMENTS

37.1% DONE 5000 VERIFIED 1639 HIT RXNS 50 DOCS

Examiner Anderson 703-605-1157

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED VERIFICATIONS: 262630 TO 276250
PROJECTED ANSWERS: 11722 TO 14748

L2 50 SEA SSS SAM L1 (1639 REACTIONS)

=> s l1 full
FULL SEARCH INITIATED 11:46:52 FILE 'CASREACT'
SCREENING COMPLETE - 242717 REACTIONS TO VERIFY FROM 12870 DOCUMENTS

89.1% DONE 216373 VERIFIED 211045 HIT RXNS (1 INCOMP) 11695 DOCS

98.9% DONE 240069 VERIFIED 234234 HIT RXNS (1 INCOMP) 12306 DOCS

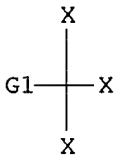
100.0% DONE 242717 VERIFIED 236874 HIT RXNS (1 INCOMP) 12386 DOCS
SEARCH TIME: 00.00.44

L3 12386 SEA SSS FUL L1 (236874 REACTIONS)

=>
Uploading 09961347b.str

L4 STRUCTURE UPLOADED

=> d
L4 HAS NO ANSWERS
L4 STR



G1 O,S,Po,Se,Te

Structure attributes must be viewed using STN Express query preparation.

=> s l4
SAMPLE SEARCH INITIATED 11:47:49 FILE 'CASREACT'
SCREENING COMPLETE - 1220 REACTIONS TO VERIFY FROM 222 DOCUMENTS

100.0% DONE 1220 VERIFIED 230 HIT RXNS 50 DOCS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED VERIFICATIONS: 22309 TO 26491
PROJECTED ANSWERS: 3390 TO 5130

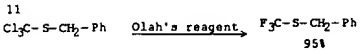
L5 50 SEA SSS SAM L4 (230 REACTIONS)

Examiner Anderson 703-605-1157

```
=> s l4 full
FULL SEARCH INITIATED 11:47:54 FILE 'CASREACT'
SCREENING COMPLETE -  25432 REACTIONS TO VERIFY FROM   4279 DOCUMENTS

100.0% DONE  25432 VERIFIED   24308 HIT RXNS                  4039 DOCS
SEARCH TIME: 00.00.03

L6         4039 SEA SSS FUL L4  ( 24308 REACTIONS)

=> s l6 and pyridine
         16818 PYRIDINE
          2730 PYRIDINES
         17675 PYRIDINE
                 (PYRIDINE OR PYRIDINES)
L7         289 L6 AND PYRIDINE

=> s l7 and benzyl trichloromethyl sulfide
         20819 BENZYL
             2 BENZYLS
         20819 BENZYL
                 (BENZYL OR BENZYLS)
           886 TRICHLOROMETHYL
          8490 SULFIDE
          3602 SULFIDES
          9325 SULFIDE
                 (SULFIDE OR SULFIDES)
             1 BENZYL TRICHLOROMETHYL SULFIDE
                 (BENZYL(W)TRICHLOROMETHYL(W)SULFIDE)
L8           1 L7 AND BENZYL TRICHLOROMETHYL SULFIDE

=> d
```

L8 ANSWER 1 OF 1 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 11

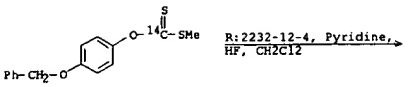


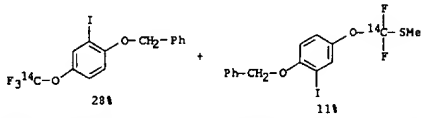
REF: Eur. Pat. Appl., 729930, 04 Sep 1996
NOTE: 0.degree. to room temp.

```
=> s l6 and benzyl trichloromethyl sulfide
         20819 BENZYL
             2 BENZYLS
         20819 BENZYL
                 (BENZYL OR BENZYLS)
           886 TRICHLOROMETHYL
          8490 SULFIDE
          3602 SULFIDES
          9325 SULFIDE
                 (SULFIDE OR SULFIDES)
             1 BENZYL TRICHLOROMETHYL SULFIDE
                 (BENZYL(W)TRICHLOROMETHYL(W)SULFIDE)
L9           1 L6 AND BENZYL TRICHLOROMETHYL SULFIDE

=> s l7 and HF
          1858 HF
            10 HFS
          1868 HF
                 (HF OR HFS)
L10         10 L7 AND HF

=> d l10 1-10
```

L10 ANSWER 1 OF 10 CASREACT COPYRIGHT 2002 ACS

RX(2) OF 52

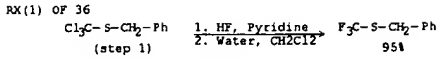




REF: Journal of Labelled Compounds & Radiopharmaceuticals, 44(12), 815-829, 2001
NOTE: KEY STEP

L10 ANSWER 2 OF 10 CASREACT COPYRIGHT 2002 ACS

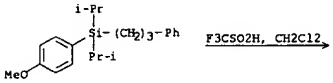
RX(1) OF 36

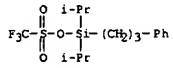


REF: U.S., 6316636, 13 Nov 2001

L10 ANSWER 3 OF 10 CASREACT COPYRIGHT 2002 ACS

RX(6) OF 61

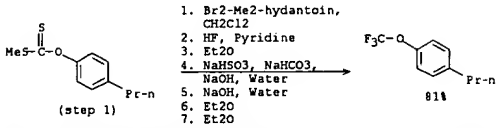




REF: Journal of Combinatorial Chemistry, 3(3), 312-318, 2001
NOTE: resin supported reaction

L10 ANSWER 4 OF 10 CASREACT COPYRIGHT 2002 ACS

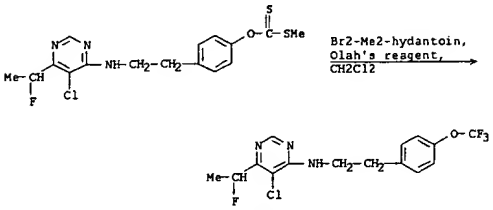
RX(7) OF 15



REF: Bulletin of the Chemical Society of Japan, 73(2), 471-484, 2000
NOTE: ANALOGUES HAVE SIMILAR REACTION

L10 ANSWER 5 OF 10 CASREACT COPYRIGHT 2002 ACS

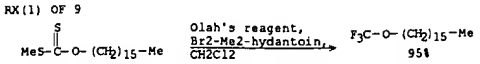
RX(2) OF 3



REF: Jpn. Kokai Tokkyo Koho, 11049759, 23 Feb 1999, Heisei

L10 ANSWER 6 OF 10 CASREACT COPYRIGHT 2002 ACS

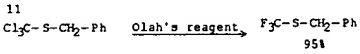
RX(1) OF 9



REF: Chemical Communications (Cambridge), (3), 309-310; 1997

L10 ANSWER 7 OF 10 CASREACT COPYRIGHT 2002 ACS

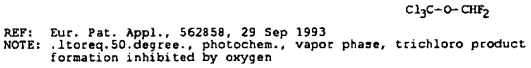
RX(1) OF 11



REF: Eur. Pat. Appl., 729930, 04 Sep 1996
NOTE: 0.degree. to room temp.

L10 ANSWER 8 OF 10 CASREACT COPYRIGHT 2002 ACS

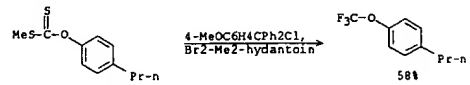
RX(2) OF 13



REF: Eur. Pat. Appl., 562858, 29 Sep 1993
NOTE: .ltoreq.50.degree., photochem., vapor phase, trichloro product formation inhibited by oxygen

L10 ANSWER 9 OF 10 CASREACT COPYRIGHT 2002 ACS

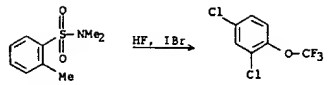
RX(1) OF 3



REF: Tetrahedron Lett., 33(29), 4173-6; 1992

L10 ANSWER 10 OF 10 CASREACT COPYRIGHT 2002 ACS

RX(3) OF 3

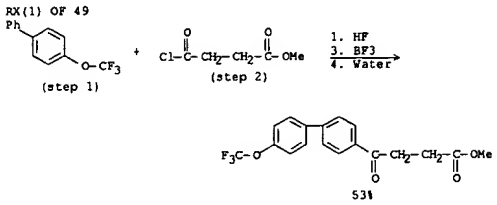


REF: Eur. Pat. Appl., 110690, 13 Jun 1984

```
=> s l6 and pyridine
         16818 PYRIDINE
          2730 PYRIDINES
         17675 PYRIDINE
                 (PYRIDINE OR PYRIDINES)
L11        289 L6 AND PYRIDINE

=> s l11 and HF
          1858 HF
            10 HFS
          1868 HF
                 (HF OR HFS)
L12          10 L11 AND HF

=> s l6 and benzyl trichloromethyl sulfide
         20819 BENZYL
             2 BENZYLS
         20819 BENZYL
                 (BENZYL OR BENZYLS)
           886 TRICHLOROMETHYL
          8490 SULFIDE
          3602 SULFIDES
          9325 SULFIDE
                 (SULFIDE OR SULFIDES)
             1 BENZYL TRICHLOROMETHYL SULFIDE
                 (BENZYL(W)TRICHLOROMETHYL(W)SULFIDE)
L13          1 L6 AND BENZYL TRICHLOROMETHYL SULFIDE

=> s l6 and HF
          1858 HF
            10 HFS
          1868 HF
                 (HF OR HFS)
L14          59 L6 AND HF

=> s l6 and peroxide
          4068 PEROXIDE
           789 PEROXIDES
          4303 PEROXIDE
                 (PEROXIDE OR PEROXIDES)
L15          40 L6 AND PEROXIDE

=> d l14 1-59
```

L14 ANSWER 1 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 49



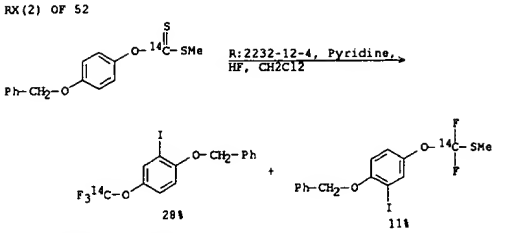
(step 1) (step 2)

53%

REF: PCT Int. Appl., 2002024622, 28 Mar 2002

L14 ANSWER 2 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(2) OF 52

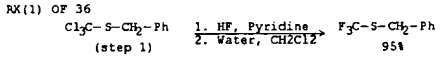


28% 11%

REF: Journal of Labelled Compounds & Radiopharmaceuticals, 44(12), 815-829; 2001
NOTE: KEY STEP

L14 ANSWER 3 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 36

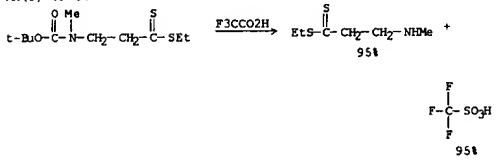


(step 1) 95%

REF: U.S., 6316636, 13 Nov 2001

L14 ANSWER 4 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(3) OF 54

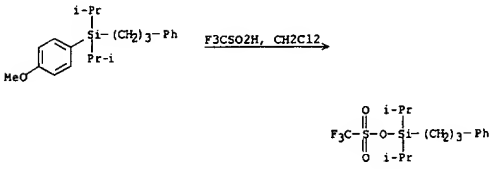


95% 95%

REF: Bioorganic & Medicinal Chemistry, 9(3), 665-675; 2001

L14 ANSWER 5 OF 59 CASREACT COPYRIGHT 2002 ACS

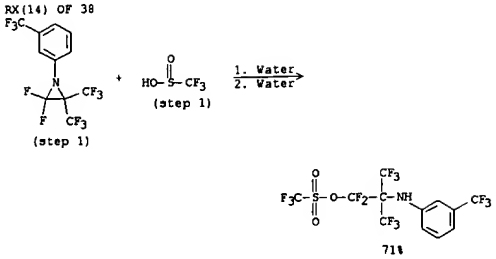
RX(6) OF 61



REF: Journal of Combinatorial Chemistry, 3(3), 312-318; 2001
NOTE: resin supported reaction

L14 ANSWER 6 OF 59 CASREACT COPYRIGHT 2002 ACS

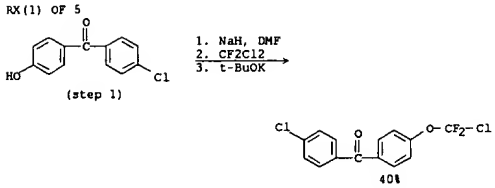
RX(14) OF 38



REF: Journal of Fluorine Chemistry, 106(1), 25-34; 2000
NOTE: author caution of exothermic reaction

L14 ANSWER 7 OF 59 CASREACT COPYRIGHT 2002 ACS

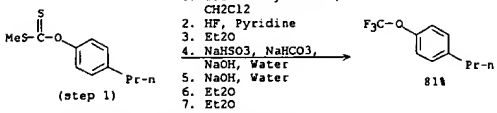
RX(1) OF 5



REF: Journal of Fluorine Chemistry, 103(1), 81-84; 2000
NOTE: alternate higher-yield procedure shown

L14 ANSWER 8 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(7) OF 15



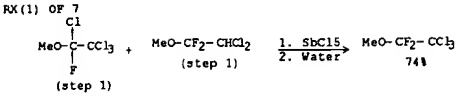
REF: Bulletin of the Chemical Society of Japan, 73(2), 471-484; 2000
NOTE: ANALOGUES HAVE SIMILAR REACTION

L14 ANSWER 9 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 2 - REACTION DIAGRAM NOT AVAILABLE

L14 ANSWER 10 OF 59 CASREACT COPYRIGHT 2002 ACS

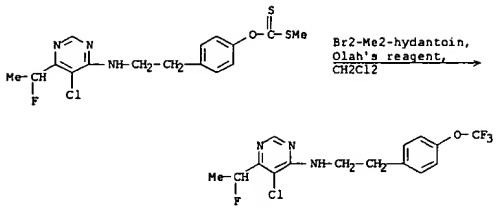
RX(1) OF 7



REF: Journal of Fluorine Chemistry, 94(1), 1-5; 1999
NOTE: safety: HF evolved during reaction

L14 ANSWER 11 OF 59 CASREACT COPYRIGHT 2002 ACS

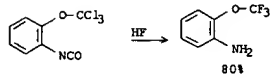
RX(2) OF 3



REF: Jpn. Kokai Tokkyo Koho, 11049759, 23 Feb 1999, Heisei

L14 ANSWER 12 OF 59 CASREACT COPYRIGHT 2002 ACS

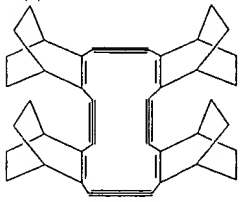
RX(2) OF 6



REF: Fr. Demande, 2763940, 04 Dec 1998

L14 ANSWER 13 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 1

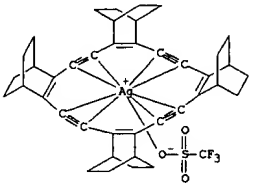


1. AgO3SCF3, THF
2. Hexane

(step 1)

Me-(CH2)4-Me + 84%

RX(1) OF 1

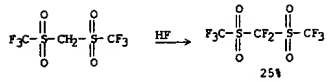


84%

REF: Chemical Communications (Cambridge), (20), 2263-2264; 1998

L14 ANSWER 14 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 9



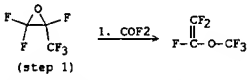
HF

25%

REF: Journal of Fluorine Chemistry, 91(1), 9-12; 1998
NOTE: electrochem.

L14 ANSWER 15 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 1



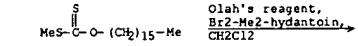
1. COF2

(step 1)

REF: Journal of Organic Chemistry, 62(18), 6160-6163; 1997
NOTE: FINAL STAGES ARE DECARBOXYLATION OF INTERMEDIATE PROPIONYL FLUORIDE

L14 ANSWER 16 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 9



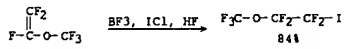
Olah's reagent, Br2-Me2-hydantoin, CH2Cl2

95%

REF: Chemical Communications (Cambridge), (3), 309-310; 1997

L14 ANSWER 17 OF 59 CASREACT COPYRIGHT 2002 ACS

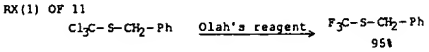
RX(4) OF 8



REF: Journal of Organic Chemistry, 61(26), 9605-9607; 1996
NOTE: regioselective

L14 ANSWER 18 OF 59 CASREACT COPYRIGHT 2002 ACS

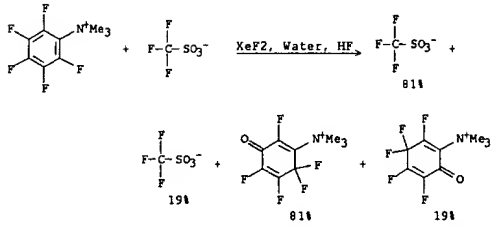
RX(1) OF 11



REF: Eur. Pat. Appl., 729930, 04 Sep 1996
NOTE: 0.degree. to room temp.

L14 ANSWER 19 OF 59 CASREACT COPYRIGHT 2002 ACS

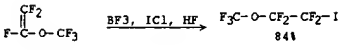
RX(5) OF 8



REF: Zeitschrift fuer Naturforschung, B: Chemical Sciences, 51(7), 1015-1021; 1996
NOTE: ANALOGOUS REACTION WITH PF6 COUNTERION GIVES SIMILAR RESULTS

L14 ANSWER 20 OF 59 CASREACT COPYRIGHT 2002 ACS

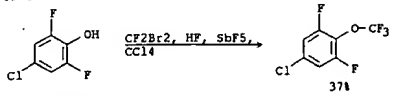
RX(2) OF 3



REF: U.S., 5481028, 02 Jan 1996

L14 ANSWER 21 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 1

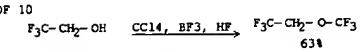


37%

REF: Ger., 4332383, 27 Apr 1995

L14 ANSWER 22 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 10

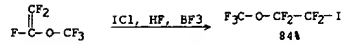


63%

REF: U.S., 5382704, 17 Jan 1995
NOTE: METAL TUBE, 150 .DEGREES. FOR 8 H

L14 ANSWER 23 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(3) OF 5

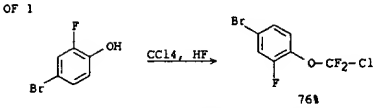


84%

REF: PCT Int. Appl., 9504020, 09 Feb 1995

L14 ANSWER 24 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 1

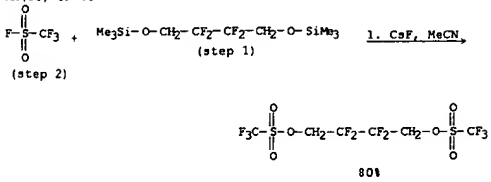


76%

REF: Jpn. Kokai Tokkyo Koho, 06298694, 25 Oct 1994, Heisei

L14 ANSWER 25 OF 59 CASREACT COPYRIGHT 2002 ACS

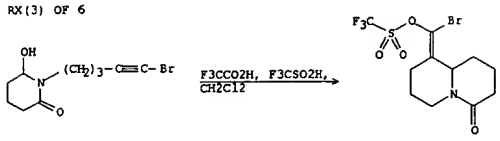
RX(35) OF 40



REF: Inorganic Chemistry, 33(24), 5463-70; 1994

L14 ANSWER 26 OF 59 CASREACT COPYRIGHT 2002 ACS

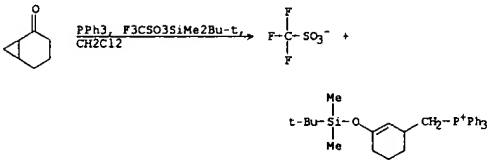
RX(3) OF 6



REF: Bulletin de la Societe Chimique de France, 131(1), 95-104; 1994

L14 ANSWER 27 OF 59 CASREACT COPYRIGHT 2002 ACS

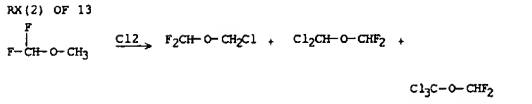
RX(1) OF 7



REF: Bull. Korean Chem. Soc., 14(4), 424-5; 1993

L14 ANSWER 28 OF 59 CASREACT COPYRIGHT 2002 ACS

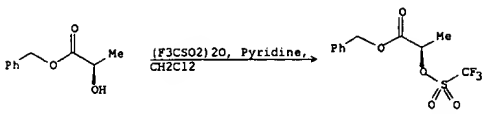
RX(2) OF 13



REF: Eur. Pat. Appl., 562858, 29 Sep 1993
NOTE: .ltoreq.50.degree., photochem., vapor phase, trichloro product formation inhibited by oxygen

L14 ANSWER 29 OF 59 CASREACT COPYRIGHT 2002 ACS

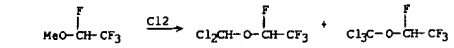
RX(1) OF 21



REF: J. Labelled Compd. Radiopharm., 33(6), 483-91; 1993

L14 ANSWER 30 OF 59 CASREACT COPYRIGHT 2002 ACS

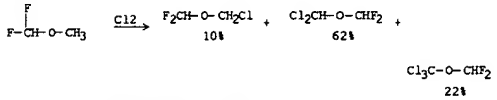
RX(5) OF 20



REF: U.S., 5205914, 27 Apr 1993
NOTE: photochem.

L14 ANSWER 31 OF 59 CASREACT COPYRIGHT 2002 ACS

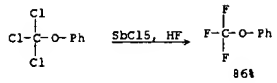
RX(1) OF 5



REF: U.S., 5196600, 23 Mar 1993
NOTE: photochem., product ratio ? on reaction conditoins, gas phase

L14 ANSWER 32 OF 59 CASREACT COPYRIGHT 2002 ACS

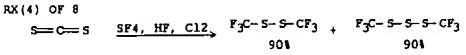
RX(1) OF 3



REF: Jpn. Kokai Tokkyo Koho, 05000988, 08 Jan 1993, Heisei

L14 ANSWER 33 OF 59 CASREACT COPYRIGHT 2002 ACS

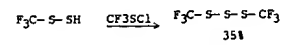
RX(4) OF 8



REF: Zh. Org. Khim., 28(5), 892-900; 1992

L14 ANSWER 34 OF 59 CASREACT COPYRIGHT 2002 ACS

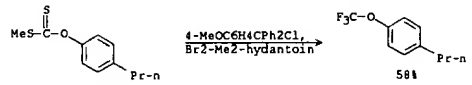
RX(1) OF 2



REF: Inorg. Chem., 31(20), 4147-50; 1992

L14 ANSWER 35 OF 59 CASREACT COPYRIGHT 2002 ACS

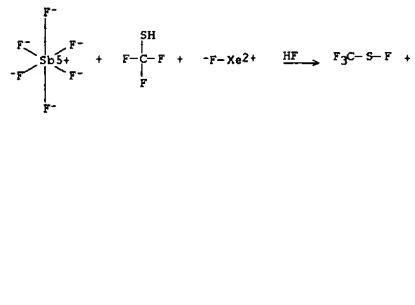
RX(1) OF 3



REF: Tetrahedron Lett., 33(29), 4173-6; 1992

L14 ANSWER 36 OF 59 CASREACT COPYRIGHT 2002 ACS

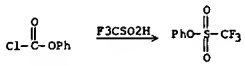
RX(2) OF 4



REF: Inorg. Chem., 31(2), 225-7; 1992

L14 ANSWER 37 OF 59 CASREACT COPYRIGHT 2002 ACS

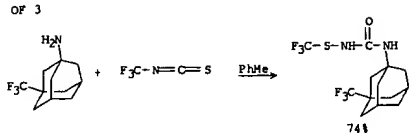
RX(2) OF 2



REF: Fr. Demande, 2647106, 23 Nov 1990

L14 ANSWER 38 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(2) OF 3



REF: J. Fluorine Chem., 49(2), 225-9; 1990

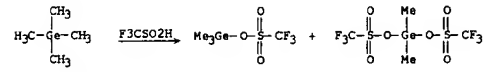
L14 ANSWER 39 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 3

REF: Ger. (East), 274820, 03 Jan 1990

L14 ANSWER 40 OF 59 CASREACT COPYRIGHT 2002 ACS

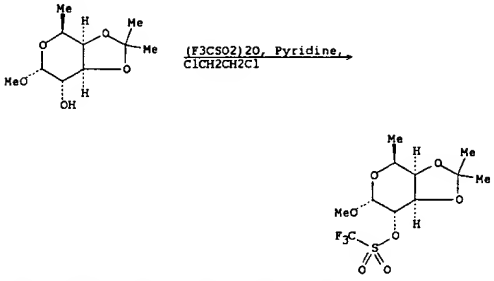
RX(1) OF 6



REF: J. Fluorine Chem., 44(2), 309-28; 1989

L14 ANSWER 41 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(2) OF 233



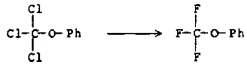
REF: Carbohydr. Res., 187(1), 67-92; 1989

L14 ANSWER 42 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(18) OF 25 - REACTION DIAGRAM NOT AVAILABLE

L14 ANSWER 43 OF 59 CASREACT COPYRIGHT 2002 ACS

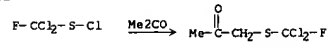
RX(1) OF 1



REF: Eur. Pat. Appl., 196529, 08 Oct 1986

L14 ANSWER 44 OF 59 CASREACT COPYRIGHT 2002 ACS

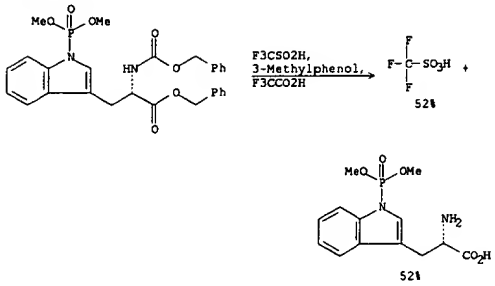
RX(1) OF 52



REF: J. Fluorine Chem., 40(2-3), 365-73; 1988

L14 ANSWER 45 OF 59 CASREACT COPYRIGHT 2002 ACS

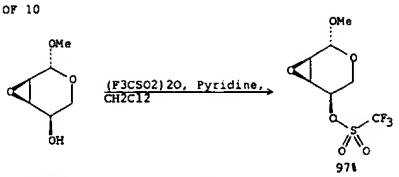
RX(10) OF 26



REF: J. Org. Chem., 54(7), 1664-8; 1989

L14 ANSWER 46 OF 59 CASREACT COPYRIGHT 2002 ACS

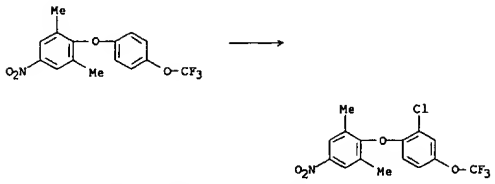
RX(3) OF 10



REF: Carbohydr. Res., 166(2), 309-13; 1987

L14 ANSWER 47 OF 59 CASREACT COPYRIGHT 2002 ACS

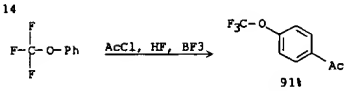
RX(1) OF 1



REF: Ger. Offen., 3602680, 06 Aug 1987

L14 ANSWER 48 OF 59 CASREACT COPYRIGHT 2002 ACS

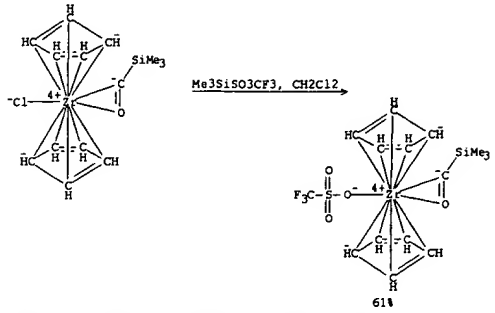
RX(1) OF 14



REF: Bull. Soc. Chim. Fr., (6), 885-90; 1986

L14 ANSWER 49 OF 59 CASREACT COPYRIGHT 2002 ACS

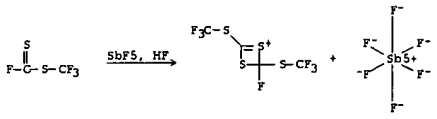
RX(14) OF 51



REF: J. Am. Chem. Soc., 109(7), 2049-56; 1987

L14 ANSWER 50 OF 59 CASREACT COPYRIGHT 2002 ACS

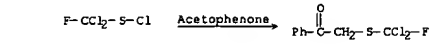
RX(5) OF 25



REF: Chem. Ber., 120(3), 429-33; 1987

L14 ANSWER 51 OF 59 CASREACT COPYRIGHT 2002 ACS

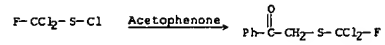
RX(2) OF 7



REF: Ger. Offen., 3341515, 30 May 1985

L14 ANSWER 52 OF 59 CASREACT COPYRIGHT 2002 ACS

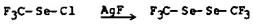
RX(3) OF 9



REF: Ger. Offen., 3341516, 30 May 1985

L14 ANSWER 53 OF 59 CASREACT COPYRIGHT 2002 ACS

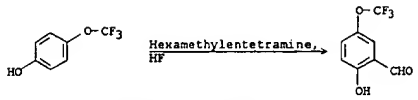
RX(1) OF 13



REF: Z. Naturforsch., B: Anorg. Chem., Org. Chem., 39B(7), 897-902; 1984

L14 ANSWER 54 OF 59 CASREACT COPYRIGHT 2002 ACS

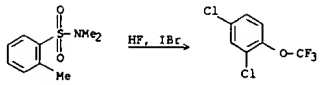
RX(1) OF 4



REF: Ger. Offen., 3304203, 09 Aug 1984

L14 ANSWER 55 OF 59 CASREACT COPYRIGHT 2002 ACS

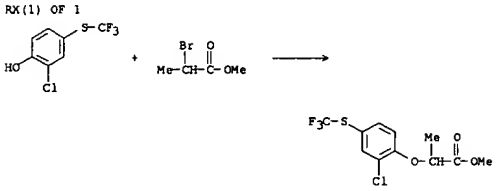
RX(3) OF 3



REF: Eur. Pat. Appl., 110690, 13 Jun 1984

L14 ANSWER 56 OF 59 CASREACT COPYRIGHT 2002 ACS

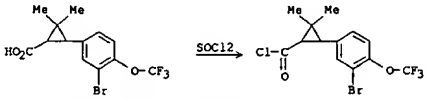
RX(1) OF 1



REF: Ger. Offen., 3232624, 22 Mar 1984

L14 ANSWER 57 OF 59 CASREACT COPYRIGHT 2002 ACS

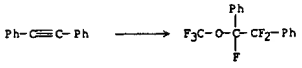
RX(1) OF 1



REF: Ger. Offen., 3128444, 03 Feb 1983

L14 ANSWER 58 OF 59 CASREACT COPYRIGHT 2002 ACS

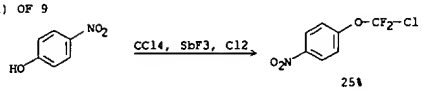
RX(26) OF 82



REF: J. Org. Chem., 45(4), 672-8; 1980

L14 ANSWER 59 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 9



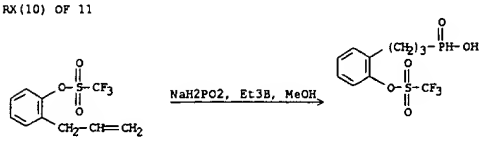
25%

REF: J. Org. Chem., 44(16), 2907-10; 1979

=> d l15 1-40

L15 ANSWER 1 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(10) OF 11

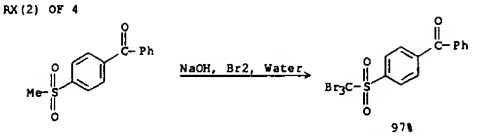


80%

REF: Journal of Organic Chemistry, 66(20), 6745-6755; 2001

L15 ANSWER 2 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(2) OF 4

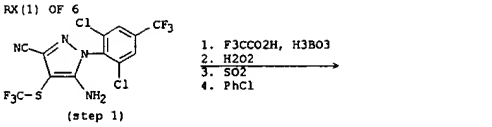


97%

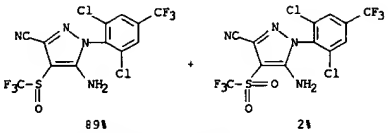
REF: Jpn. Kokai Tokkyo Koho, 2001220376, 14 Aug 2001
NOTE: adding Br2 over 5 h at 60-70.degree.; 65-75.degree. for 10 h

L15 ANSWER 3 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 6



(step 1)

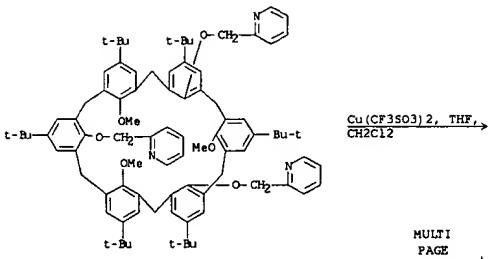


89% 2%

REF: PCT Int. Appl., 2001030760, 03 May 2001

L15 ANSWER 4 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 4



MULTI PAGE IMAGE

334674-79-2

81%

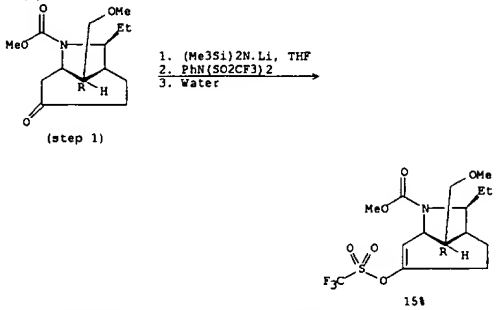
RX(1) OF 4

81%

REF: Comptes Rendus de l'Academie des Sciences, Serie IIc: Chimie, 3(10), 811-819; 2000

L15 ANSWER 5 OF 40 CASREACT COPYRIGHT 2002 ACS

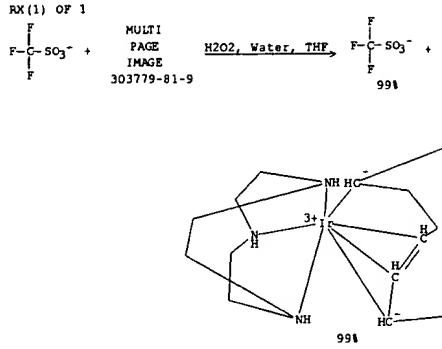
RX(5) OF 261



REF: Journal of Organic Chemistry, 65(24), 8317-8325; 2000
NOTE: regioselective

L15 ANSWER 6 OF 40 CASREACT COPYRIGHT 2002 ACS

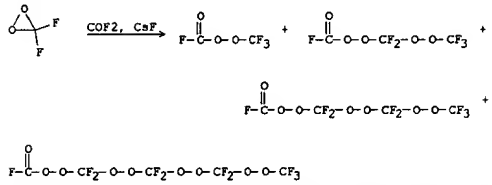
RX(1) OF 1



REF: Chemical Communications (Cambridge), (17), 1681-1682; 2000
NOTE: N-Me analog also used; other oxidn. agents gave no result

L15 ANSWER 7 OF 40 CASREACT COPYRIGHT 2002 ACS

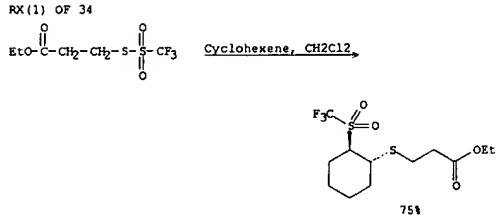
RX(2) OF 3



REF: Chemical Communications (Cambridge), (17), 1671-1672; 1999
NOTE: gas-phase reactants over solid catalyst in sealed tube

L15 ANSWER 8 OF 40 CASREACT COPYRIGHT 2002 ACS

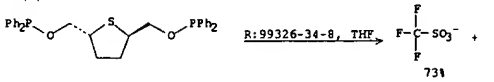
RX(1) OF 34

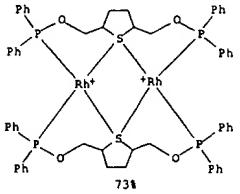


REF: Tetrahedron, 55(26), 8065-8074; 1999
NOTE: stereoselective

L15 ANSWER 9 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(3) OF 4

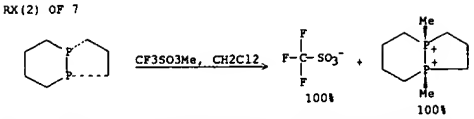




REF: Organometallics, 17(23), 4976-4982, 1998

L15 ANSWER 10 OF 40 CASREACT COPYRIGHT 2002 ACS

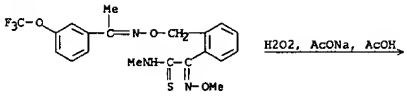
RX(2) OF 7

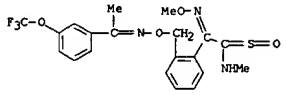


REF: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry, (10), 1643-1656, 1998

L15 ANSWER 11 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 1

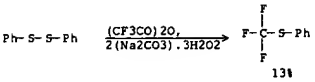




REF: PCT Int. Appl., 9700859, 09 Jan 1997

L15 ANSWER 12 OF 40 CASREACT COPYRIGHT 2002 ACS

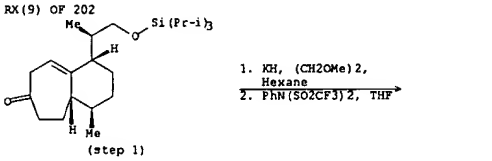
RX(6) OF 6

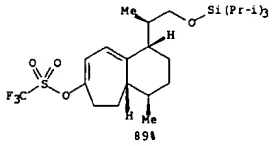


REF: Eur. Pat. Appl., 700885, 13 Mar 1996
NOTE: one-pot reaction

L15 ANSWER 13 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(9) OF 202



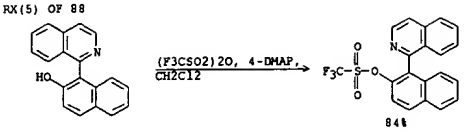


89%

REF: Journal of Medicinal Chemistry, 39(9), 1885-97; 1996

L15 ANSWER 14 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(5) OF 88

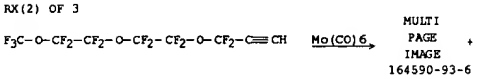


84%

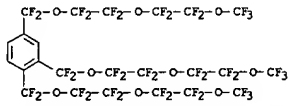
REF: PCT Int. Appl., 9513284, 18 May 1995

L15 ANSWER 15 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(2) OF 3



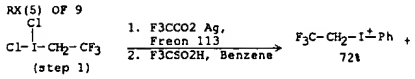
MULTI
PAGE
IMAGE
164590-93-6



REF: Izvestiya Akademii Nauk, Seriya Khimicheskaya, (10), 1789-92; 1994
NOTE: THERMAL

L15 ANSWER 16 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(5) OF 9



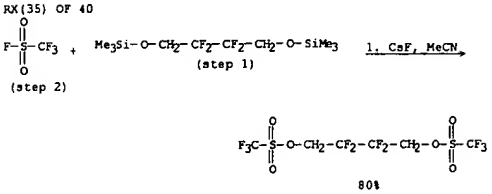
72%

72%

REF: Tetrahedron Letters, 35(43), 8015-18; 1994

L15 ANSWER 17 OF 40 CASREACT COPYRIGHT 2002 ACS

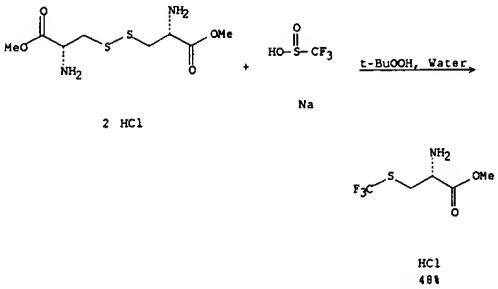
RX(35) OF 40



REF: Inorganic Chemistry, 33(24), 5463-70; 1994

L15 ANSWER 18 OF 40 CASREACT COPYRIGHT 2002 ACS

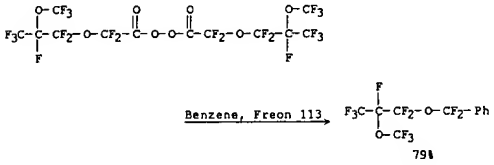
RX(1) OF 9



REF: Journal of Fluorine Chemistry, 68(1), 63-6; 1994
NOTE: stereoselective

L15 ANSWER 19 OF 40 CASREACT COPYRIGHT 2002 ACS

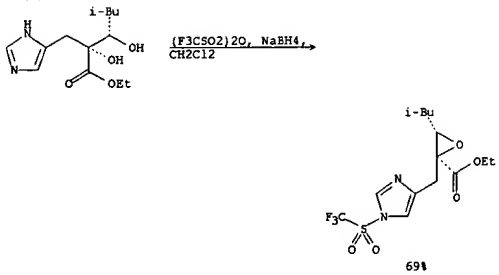
RX(1) OF 7



REF: Jpn. Kokai Tokkyo Koho, 05170689, 09 Jul 1993, Heisei
NOTE: 40.degree.

L15 ANSWER 20 OF 40 CASREACT COPYRIGHT 2002 ACS

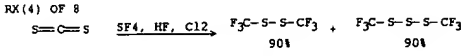
RX(6) OF 28



REF: J. Org. Chem., 58(7), 1762-5; 1993

L15 ANSWER 21 OF 40 CASREACT COPYRIGHT 2002 ACS

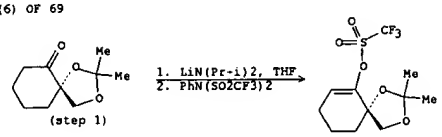
RX(4) OF 8



REF: Zh. Org. Khim., 28(5), 892-900; 1992

L15 ANSWER 22 OF 40 CASREACT COPYRIGHT 2002 ACS

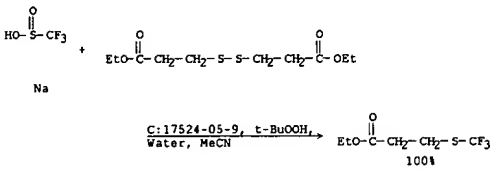
RX(6) OF 69



REF: J. Org. Chem., 57(20), 5301-12; 1992

L15 ANSWER 23 OF 40 CASREACT COPYRIGHT 2002 ACS

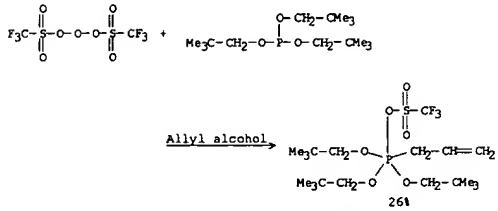
RX(1) OF 7



REF: Eur. Pat. Appl., 458684, 27 Nov 1991

L15 ANSWER 24 OF 40 CASREACT COPYRIGHT 2002 ACS

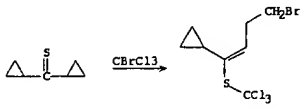
RX(4) OF 16



REF: J. Am. Chem. Soc., 113(6), 2242-6; 1991

L15 ANSWER 25 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(5) OF 5



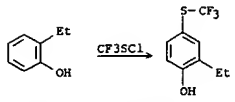
stereoisomers

83%

REF: J. Am. Chem. Soc., 113(5), 1730-6; 1991
NOTE: photochem.

L15 ANSWER 26 OF 40 CASREACT COPYRIGHT 2002 ACS

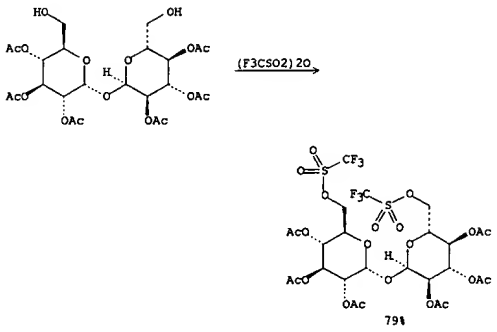
RX(1) OF 2



REF: Ger. Offen., 3836149, 10 May 1990

L15 ANSWER 27 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(8) OF 18

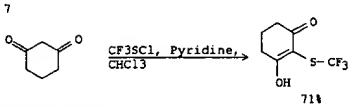


79%

REF: Carbohydr. Res., 200,, 377-89; 1990

L15 ANSWER 28 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 7

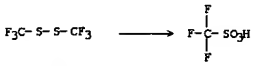


71%

REF: J. Fluorine Chem., 47(1), 131-6; 1990
NOTE: TAUTOMERIC REACTANT ALSO PRESENT

L15 ANSWER 29 OF 40 CASREACT COPYRIGHT 2002 ACS

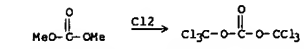
RX(1) OF 1



REF: Ger. Offen., 3712318, 20 Oct 1988

L15 ANSWER 30 OF 40 CASREACT COPYRIGHT 2002 ACS

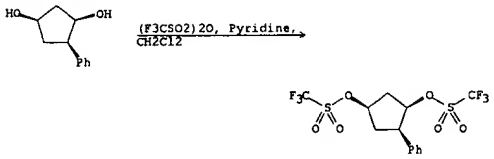
RX(1) OF 1



REF: Bul. Stiint. Teh. Inst. Politeh. "Traian Vuia" Timisoara, Ser. Chim., 32(1-2), 53-8; 1987
NOTE: photochem.

L15 ANSWER 31 OF 40 CASREACT COPYRIGHT 2002 ACS

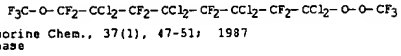
RX(18) OF 393



REF: J. Org. Chem., 53(13), 3098-104; 1988

L15 ANSWER 32 OF 40 CASREACT COPYRIGHT 2002 ACS

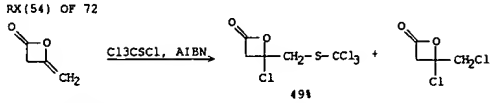
RX(1) OF 2



REF: J. Fluorine Chem., 37(1), 47-51; 1987
NOTE: gas phase

L15 ANSWER 33 OF 40 CASREACT COPYRIGHT 2002 ACS

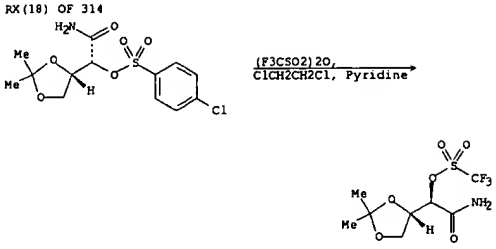
RX(54) OF 72



REF: J. Chem. Soc., Perkin Trans. 1, (12), 2081-90; 1986
NOTE: photochem.

L15 ANSWER 34 OF 40 CASREACT COPYRIGHT 2002 ACS

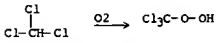
RX(18) OF 314



REF: J. Org. Chem., 50(19), 3462-7; 1985

L15 ANSWER 35 OF 40 CASREACT COPYRIGHT 2002 ACS

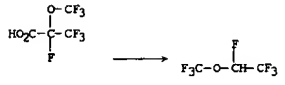
RX(1) OF 13



REF: Angew. Chem., 97(1), 48; 1985

L15 ANSWER 36 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 3

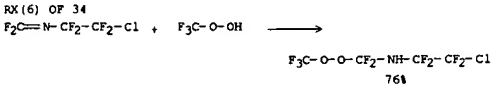


Na

REF: Zh. Vses. Khim. O-va., 29(1), 113-14; 1984

L15 ANSWER 37 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(6) OF 34



76%

REF: J. Org. Chem., 48(25), 4844-7; 1983

L15 ANSWER 38 OF 40 CASREACT COPYRIGHT 2002 ACS

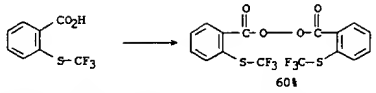
RX(1) OF 40

85%

REF: J. Fluorine Chem., 20(5), 695-8; 1982

L15 ANSWER 39 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(4) OF 7

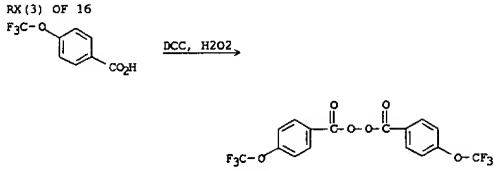


60%

REF: Khimiya i Tekhnol. Elementoorgan. Poluproduktov. i Polimerov, Volgograd, 92-7; 1981

L15 ANSWER 40 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(3) OF 16



REF: Zh. Org. Khim., 17(8), 1652-7; 1981

```
=> fil caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   464.31     464.52

FILE 'CAPLUS' ENTERED AT 11:55:11 ON 09 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)
```



```
FILE COVERS 1907 - 9 Sep 2002  VOL 137 ISS 11
FILE LAST UPDATED: 8 Sep 2002  (20020908/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

CAS roles have been modified effective December 16, 2001. Please
check your SDI profiles to see if they need to be revised. For
information on CAS roles, enter HELP ROLES at an arrow prompt or use
the CAS Roles thesaurus (/RL field) in this file.

=> s fluorocarbon
         12055 FLUOROCARBON
          3750 FLUOROCARBONS
L16      13705 FLUOROCARBON
                (FLUOROCARBON OR FLUOROCARBONS)

=> s l16 and process
       1708883 PROCESS
       1096956 PROCESSES
       2519833 PROCESS
                 (PROCESS OR PROCESSES)
L17       2427 L16 AND PROCESS

=> s l17 and peroxide or halogen
        159105 PEROXIDE
         37803 PEROXIDES
        174663 PEROXIDE
                 (PEROXIDE OR PEROXIDES)
         92775 HALOGEN
         17591 HALOGENS
        102322 HALOGEN
                 (HALOGEN OR HALOGENS)
L18     102346 L17 AND PEROXIDE OR HALOGEN
```

```
=> s l17 and (peroxide or halogen)
        159105 PEROXIDE
         37803 PEROXIDES
        174663 PEROXIDE
                 (PEROXIDE OR PEROXIDES)
         92775 HALOGEN
         17591 HALOGENS
        102322 HALOGEN
                 (HALOGEN OR HALOGENS)
L19         72 L17 AND (PEROXIDE OR HALOGEN)

=> s l19 and benzyl trichloromethyl sulfide
        120082 BENZYL
            43 BENZYLS
        120096 BENZYL
                 (BENZYL OR BENZYLS)
          5762 TRICHLOROMETHYL
             2 TRICHLOROMETHYLS
          5763 TRICHLOROMETHYL
                 (TRICHLOROMETHYL OR TRICHLOROMETHYLS)
        255284 SULFIDE
         71298 SULFIDES
        284092 SULFIDE
                 (SULFIDE OR SULFIDES)
             1 BENZYL TRICHLOROMETHYL SULFIDE
                 (BENZYL(W)TRICHLOROMETHYL(W)SULFIDE)
L20          0 L19 AND BENZYL TRICHLOROMETHYL SULFIDE

=> s l19 and sulfur
        274389 SULFUR
           434 SULFURS
        274609 SULFUR
                 (SULFUR OR SULFURS)
L21         12 L19 AND SULFUR

=> d ibib abs hitstr 1-12
```

L21 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:271049 CAPLUS
DOCUMENT NUMBER: 136:298291
TITLE: Etching with **halogen**-containing gas mixtures for removal of rhodium and/or iridium films
INVENTOR(S): Vaartstra, Brian A.
PATENT ASSIGNEE(S): Micron Technology, Inc., USA
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6368518	B1	20020409	US 1999-382506	19990825

AB The Ir, Rh, or Ir-Rh alloy films on metal or semiconductor substrates are removed by etching with gas or plasma contg. **halogen** (or halide vapor) and preferably an auxiliary gas. The etching gas mixt. typically contains: (a) **halogen**, halide, and optionally **fluorocarbon** or chlorocarbon vapors; and (b) the auxiliary gas, typically CO pr NO; and (c) optional O-contg. gas, esp. O2. The **process** is suitable for pattern etching of the Ir or Rh films precoated with a resist layer. The typical gas mixt. for etching of Ir electrode film contains F2, CO, and Ar.
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:614312 CAPLUS
DOCUMENT NUMBER: 135:161183
TITLE: Method for planarizing polysilicon layer by etching with oxygen- and **halogen**-based gas mixture
INVENTOR(S): Lin, Chingfu
PATENT ASSIGNEE(S): Taiwan Semiconductor Manufacturing Co., Ltd., Taiwan
SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6277741	B1	20010821	US 1999-282052	19990329

PRIORITY APPLN. INFO.: TW 1999-88103215AA 19990303
AB A method for planarizing a polysilicon layer is described. A polysilicon layer is etched with an O-based gas and a **halogen**-based gas. The O-based gas comprises an N oxide gas. The N oxide gas includes NO, NO2, N2O, or the combination thereof. The **halogen**-based gas includes a F, Cl, Br, I, NF3, SF6, Cl2, HCl, SiCl4, **fluorocarbon**, or a combination thereof. The **fluorocarbon** includes CF4, CHF3, CH2F2, CH3F, or the like.
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:214847 CAPLUS
DOCUMENT NUMBER: 134:256151
TITLE: Decomposition treatment agent and decomposition method for organic **halogen** compounds.
INVENTOR(S): Furuta, Takayuki; Murakami, Tatsuo; Aitou, Shigeru; Akatsuka, Yoshimasa; Takeuchi, Akihiro
PATENT ASSIGNEE(S): Ueda Sekkai Seizo K. K., Japan; Chubu Electric Power Co., Inc.
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001079344	A2	20010327	JP 1999-262600	19990916

AB The org. **halogen** decompn. agents contain magnesium oxide at .gtoreq.50 wt. % or magnesium oxide and calcium oxide at .gtoreq.50 wt. % in which the mol. ratio of CaO/CaO+MgO is .ltoreq.0.67. The granular agents do not melt and form lumpy masses when in contact with org. **halogen** decompn. at high temp. (800-1400.degree.).

L21 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:101447 CAPLUS
DOCUMENT NUMBER: 134:140485
TITLE: Sidewall polymer forming gas additives for plasma etching **processes** in semiconductor device fabrication
INVENTOR(S): Williams, Raney; Chinn, Jeffrey; Trevor, Jitske; Lill, Thorsten B.; Nallan, Padmapani; Varga, Tamas; Mace, Herve
PATENT ASSIGNEE(S): Applied Materials, Inc., USA
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001009934	A1	20010208	WO 2000-US21456	20000803
W: JP, KR				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1208588	A1	20020529	EP 2000-950996	20000803
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				

PRIORITY APPLN. INFO.: US 1999-366509 A 19990803
WO 2000-US21456 W 20000803
AB A **process** of reducing crit. dimension (CD) microloading in dense and isolated regions of etched features of Si-contg. material on a substrate uses a plasma of an etchant gas and an additive gas. In one version, the etchant gas comprises **halogen** species absent F, and the additive gas comprises F species and C species, or H species and C species.
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:540835 CAPLUS
DOCUMENT NUMBER: 133:139536
TITLE: Method and apparatus for suppressing greenhouse effect gases
INVENTOR(S): Shoji, Yuichi; Unoki, Kazuo; Nagayama, Kenichi
PATENT ASSIGNEE(S): Toshiba Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000218129	A2	20000808	JP 1999-22284	19990129

AB Emission of CO2 gas generated during treatment of usable resources such as fossil fuels, combustible wastes, and the likes in a molten salt furnace is suppressed by utilizing CO2 for synthesis of MeOH or storing CO2 to be utilized later. Alternatively, greenhouse effect gases, e.g. CH4, NO2, **fluorocarbons**, SF6, **halogen**-contg. gases, and their liqs., can be detoxicated by treating them in a molten salt reactor. The app. for suppressing greenhouse effect gases comprises a molten salt reactor into which the greenhouse effect gases and acidic gases are introduced, a filtration app. for filtering insol. components produced in the reactor, and a molten salt electrolytic regenerator for regenerating the salts in the filtered liq. Another app. is also claimed. CO2 is utilized for MeOH synthesis or as pure CO2 in a closed system and greenhouse effect gases besides CO2 are detoxicated and decompd. with a miniaturized app.

L21 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:214996 CAPLUS
DOCUMENT NUMBER: 126:334853
TITLE: Ion/surface reactions, surface-induced dissociation and surface modification resulting from hyperthermal collisions of OCNCO+, OCNCS+, (CH3)2SiNCO+, and (CH3)2SiNCS+ with a fluorinated self-assembled monolayer surface
AUTHOR(S): Miller, S. A.; Luo, H.; Jiang, X.; Rohrs, H. W.; Cooks, R. G.
CORPORATE SOURCE: Department of Chemistry, Purdue University, West Lafayette, USA
SOURCE: International Journal of Mass Spectrometry and Ion Processes (1997), 160(1-3), 83-105
CODEN: IJMPDN; ISSN: 0168-1176
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Low-energy (10-90 eV) collisions of the pseudohalogen-contg. ions OCNCO+ (1), OCNCS+ (2), (CH3)2SiNCO+ (3), and (CH3)2SiNCS+(4) with fluorinated self-assembled (F-SAM) monolayer surfaces lead to surface-induced dissocn. (SID) and to a variety of ion/surface reactions. The lowest energy fragmentation **process** in both OC-NCO+ and OC-NCS+ is C-N bond cleavage but the strength of these bonds is significantly different. They are estd. from surface-induced dissocn. data taken as a function of collision energy (energy resolved mass spectra) to be 4 and 3 eV, resp. The silyl ions, (3) and (4), preferentially fragment by Si-C bond cleavage and dissoc. more readily than (1) and (2). Other SID **processes** also occur by simple cleavage of the various strong bonds in these ions and charge retention by the **sulfur** in preference to oxygen is evident in the isothiocyanate spectra. The collision energy dependence of the scattered ion spectra display the competition between elastic scattering, dissocn., reaction, and surface sputtering. The extent of sputtering increases with collision energy and is greater in (1) and (2) than it is in the silicon-contg. ions (3) and (4), and the implications of this result for the ionization energy of the radicals corresponding to (1)-(4), are addressed. On the other hand, OCNCO+ and OCNCS+ are less reactive than their silyl counterparts, and data suggest that the obsd. reactions do not proceed by charge exchange but instead by a direct reaction mechanism. The reaction products in the two pairs of ions (e.g. FCO+ from (1), FCS+ from (2), vs. SiF+ and SiH2F+ from (3) and (4)) are notably different, consistent with the differences in the SID behavior and showing that the major reactive site in (3) and (4) is the silicon atom. Comparisons between the isocyanates and isothiocyanates show that the NCS group confers much greater reactivity than the NCO group within each pair of projectile ions. Analogies are found in the ion/surface reactions of the **halogens** and pseudohalogens, including the apparent displacement of fluorine in the F-SAM by NCO and NCS groups suggested by the scattered ions at m/z 73 (OCNCF+), m/z 64 (NCF2+) and m/z 45 (NCF+). Evidence that a pseudohalogen group exchanges with a fluorine from the surface is also found in the presence of FCO+ and FCS+ among the scattered products of collisions of (2) with the **fluorocarbon** surface.
The collision energy dependence of these ion/surface reaction products for the OCNCO+ and OCNCS+ projectile ions provides evidence for dissocn. at the surface followed or accompanied by bond formation. A general mechanism is proposed for the obsd. ion/surface reactions based on Lewis

L21 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)
acid/base rather than redox chem. and the occurrence of fragmentation at the surface rather than after departure. The silyl ions show ion/surface reactions which are dominated by fluorine abstraction from the surface but they also include such remarkable **processes** as fluorine-for-Me substitution, which occurs with the isothiocyanate projectile ion (4). Surface modification of fluorinated self-assembled monolayer surfaces was accomplished by prolonged bombardment with low-energy OCNCS+ and (CH3)2SiNCS+ ions. Evidence is provided for incorporation of Me, silyl, and NCS groups into the modified surface, although the energetic conditions needed to cause the bond dissocns. necessary for ion/surface reactions make the formation of modified surfaces esp. difficult in these cases.

L21 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:316220 CAPLUS
DOCUMENT NUMBER: 123:45714
TITLE: Dry etching of silicon compound layers
INVENTOR(S): Yanagida, Toshiharu
PATENT ASSIGNEE(S): Sony Corp., Japan
SOURCE: U.S., 8 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5376234	A	19941227	US 1993-78928	19930621
JP 3109253	B2	20001113	JP 1992-170980	19920629

PRIORITY APPLN. INFO.: JP 1992-170980 A 19920629

AB A mercaptan, a thioether, and/or a disulfide having a **fluorocarbon** side chain is used as a main component of the etching gas. These compds. may form CFx+ and S on dissocn. due to elec. discharges, and contribute to high-rate etching and surface protection of a wafer. If a **halogen** compd. such as COF2, SOF2, or NOF is added to the etching gas, a high-rate etching reaction due to extn. of O atoms from SiO2 and structural reinforcement of carbonaceous polymer become possible. Also, S2F2 may be added for reinforcing deposition of S. These effects lead to a redn. of the amt. of deposited polymer necessary for highly selective processing, and contribute greatly to low pollution in a **process**.

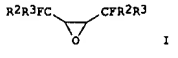
L21 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:686783 CAPLUS
DOCUMENT NUMBER: 121:286783
TITLE: Low-Energy Collisions of Group IIIA, IVA, VA, VIA, and VIIA Ions with fluoroalkyl SAM Surfaces: Reactions, Chemical Sputtering, and Mechanistic Implications
AUTHOR(S): Pradeep, T.; Ast, T.; Cooks, R. G.; Feng, B.
CORPORATE SOURCE: Department of Chemistry, Purdue University, West Lafayette, IN, 47907, USA
SOURCE: J. Phys. Chem. (1994), 98(37), 9301-11
CODEN: JPCHAX; ISSN: 0022-3654
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Low-energy (10-90 eV) at. ions of Group IIIA, IVA, VA, VIA, and VIIA elements (E) undergo reactions with a fluorinated self-assembled monolayer surface to give fluoride cations, EFn+; 1, 2, or 3 F atoms can be abstracted. Ion/surface reactions are also obsd. with polyat. ions of these elements, but in general, at. ions are much more reactive and react at lower collision energies than the corresponding polyat. species. The higher collision energies reflect increased energy consumption needed for fragmentation. Most of the ion/surface reactions studied in this study are endothermic and are driven by the translational energy of the projectile, although there remains a high degree of thermochem. control over reactivity. Thermochem. control over neutralization of the primary beam is also evident; ions with high recombination energies (e.g., N+ and O+) completely neutralize at the **fluorocarbon** surface. In addn., certain general trends in behavior are obsd. for elements within the same periodic group. The reactions occur in single scattering events, and they are not assocd. with electron transfer from the ion to the surface, as are the well-known H and alkyl group abstractions by org. radical ions. The surface has no memory of the projectile, even after prolonged ion beam exposure. In most cases, the ion/surface reaction seems to occur after, or in concert with, dissocn. of the polyat. projectile. When multiple abstractions occur, the F atoms can be lost from the same alkyl chain; evidence for this is the enhanced intensity of specific sputtering products (e.g. C3F3+) upon collisions of ions (e.g., Sb+) which readily abstr. > 1 F atom. Ion/surface reactions in which new bonds are formed in the surface alkyl group are also obsd.; such reactions produce unusual product ions which are sensitive to the chem. nature of the projectile. Examples include Cl-for-F atom substitution at the surface and PCF2+ formation in P+ collisions. These **processes** suggest the possibility of selective chem. modification of the outermost monolayers of surfaces by using low-energy reactive ion beams.

L21 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:522988 CAPLUS
DOCUMENT NUMBER: 121:122988
TITLE: 1 MHz Parallel-plate discharges in etching gases: CF4 and SF6
AUTHOR(S): Kobayashi, Hidehiko; Kusunoki, Hideki; Ishikawa, Itsuo; Nagaseki, Kazuya; Saito, Yukinori; Suganomata, Shinji
CORPORATE SOURCE: Fac. Eng., Yamanashi Univ., Kofu, 400, Japan
SOURCE: Shinku (1994), 37(3), 308-11
CODEN: SHINAM; ISSN: 0559-8516
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB The electronegativities and discharge characteristics of **halogen**-contg. gases such as CF4 and SF6 are compared. These gases are discharged between parallel plate electrodes and used for etching **process** for semiconductor device fabrication.

L21 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:582630 CAPLUS
DOCUMENT NUMBER: 115:182630
TITLE: **Fluorocarbon** compounds and **processes** for preparation thereof
INVENTOR(S): Krespan, Carl George
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9109010	A2	19910627	WO 1990-US7114	19901210
WO 9109010	A3	19910905		
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
US 5101058	A	19920331	US 1989-448651	19891211
CA 2071199	AA	19910612	CA 1990-2071199	19901210
EP 504285	A1	19920923	EP 1991-901382	19901210
EP 504285	B1	19941012		
R: DE, FR, GB, IT				
JP 05502866	T2	19930520	JP 1991-501767	19901210
JP 3172173	B2	20010604		
JP 2000053665	A2	20000222	JP 1999-201502	19901210
US 5185477	A	19930209	US 1991-803441	19911206
JP 2000053604	A2	20000222	JP 1999-201485	19990715
JP 3130303	B2	20010131		

PRIORITY APPLN. INFO.: US 1989-448651 A 19891211
JP 1991-501767 A3 19901210
WO 1990-US7114 W 19901210
OTHER SOURCE(S): MARPAT 115:182630
GI



I

AB Fluorinated (poly)sulfonates and halosulfonates R2R3FCCHXCHR1(OSO2)nZ (R1 = H, CFR2R3; R2, R3 = F, perfluoroalkyl; R1 = H, CFR2R3; X = Cl, Br, iodo; Z = Cl, Br, OCHR1CHXCFR2R3; n = 1-6), halohydrins R2R3CHXCH(OH)CFR2R3, and epoxides (I), useful as monomers and chem. intermediates, are prepd. by reacting (perfluoroalkyl)ethylenes R2R3FCCH:CHR1 with SO3 and a **halogen**, i.e. Cl, Br or iodine, in the optional presence of a solvent, and further reacting the products. Thus, 0.13 mol CF3(CF2)3CH:CH2 was added to 0.12 mol SO3 with stirring at 25.degree. followed by 0.12 mol I, whereupon an exotherm carried to 45.degree. and then abated. The mixt. was stirred overnight at 25.degree. and then at 50.degree. for 30 min, evapd. in vacuo at 0.15 mmHg, stirred with H2O, filtered and air-dried to give 58% (based on SO3) [CF3(CF2)3CHICH2O]2SO2.

L21 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1984:478619 CAPLUS
DOCUMENT NUMBER: 101:78619
TITLE: On the scavenging of **sulfur** dioxide by cloud and raindrops: II. An experimental study of **sulfur** dioxide absorption and desorption for water drops in air
AUTHOR(S): Walcek, C. J.; Pruppacher, H. R.; Topalian, J. H.; Mitra, S. K.
CORPORATE SOURCE: Dep. Atmospheric Sci., Univ. California, Los Angeles, CA, 90024, USA
SOURCE: J. Atmos. Chem. (1984), 1(3), 291-306
CODEN: JATCE2
DOCUMENT TYPE: Journal
LANGUAGE: English
AB For the purpose of testing our previously described theory of SO2 scavenging, a lab. investigation was carried out in the UCLA 33 m long rainshaft. Drops with radii between 250 and 2500 .mu.m were allowed to come to terminal velocity, after which they passed through a chamber of variable length filled with various SO2 concns. in air. After falling through a gas sepg. chamber consisting of a **fluorocarbon** gas, the drops were collected and analyzed for their total S content to det. the rate of SO2 absorption. The SO2 concn. in air was 1-60 vol.%. Such relatively large concns. were necessary due to the short times the drops were exposed to SO2. Theor. S concn. in the drops agreed well with those obsd., if the drops had radii <500 .mu.m. To obtain agreement between predicted and obsd. S concns. in larger drops, an empirically derived eddy diffusivity for SO2 in water had to be included in the theory to take into account the effect of turbulent mixing inside such large drops. In a subsequent set of expts., drops initially satd. with S (IV) were allowed to fall through S-free air to det. the rate of SO2 desorption. The results agreed well with the results of the theor. model, thus justifying the reversibility assumption. The effects of oxidn. on SO2 absorption was studied by means of drops contg. various amts. of H2O2. For comparable exposure times to SO2, the S concn. in drops with H2O2 was 10 times higher than the concn. in drops in which no oxidn. occurred.

L21 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1983:514428 CAPLUS
DOCUMENT NUMBER: 99:114428
TITLE: Silicon surface treatment in **halogen** -containing plasma
AUTHOR(S): Dikarev, Yu. I.; Esin, V. I.; Naumenko, N. I.
CORPORATE SOURCE: Voronezh, USSR
SOURCE: Fiz. Khim. Obrab. Mater. (1983), (4), 61-5
CODEN: FKOMAT; ISSN: 0015-3214
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB The **processes** of etching were studied of single-crystal Si with different orientations and surface treatments in the plasma of a high-frequency discharge of F-contg. gases at pressures of 13.3-133.3 Pa. By changing the tech. parameters of the **process**, one can obtain both pure etching of Si and deposition of films identified as **fluorocarbon**. During plasmachem. etching of a polished surface, only insignificant smoothing of the initial relief occurs with development of an etching figure characteristic for the given orientation. Electronog. studies of samples after plasmachem. etching in the polishing regime show the absence of amorphization of the surface in the treatment **process**.

```
=> s fluorocarbon/product
'PRODUCT' IS NOT A VALID FIELD CODE
L22           0 FLUOROCARBON/PRODUCT

=> s fluorocarbon/p
'P' IS NOT A VALID FIELD CODE
L23           0 FLUOROCARBON/P

=> fil caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    46.12     510.64

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -7.43      -7.43

FILE 'CAPLUS' ENTERED AT 11:58:35 ON 09 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)
```



```
FILE COVERS 1907 - 9 Sep 2002  VOL 137 ISS 11
FILE LAST UPDATED: 8 Sep 2002  (20020908/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

CAS roles have been modified effective December 16, 2001. Please
check your SDI profiles to see if they need to be revised. For
information on CAS roles, enter HELP ROLES at an arrow prompt or use
the CAS Roles thesaurus (/RL field) in this file.

=> fil reg
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.40     511.04

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                     0.00      -7.43

FILE 'REGISTRY' ENTERED AT 11:58:42 ON 09 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
```

STRUCTURE FILE UPDATES: 6 SEP 2002 HIGHEST RN 447682-31-7
DICTIONARY FILE UPDATES: 6 SEP 2002 HIGHEST RN 447682-31-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

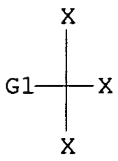
Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=>
Uploading 09961347b.str

L24 STRUCTURE UPLOADED

=> d
L24 HAS NO ANSWERS
L24 STR



G1 O,S,Po,Se,Te

Structure attributes must be viewed using STN Express query preparation.

=> s l24
SAMPLE SEARCH INITIATED 11:59:11 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 5036 TO ITERATE

19.9% PROCESSED 1000 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 96468 TO 104972
PROJECTED ANSWERS: 94495 TO 102915

L25 50 SEA SSS SAM L24

=> s l24 full
FULL SEARCH INITIATED 11:59:17 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 100762 TO ITERATE

100.0% PROCESSED 100762 ITERATIONS 97689 ANSWERS
SEARCH TIME: 00.00.04

L26 97689 SEA SSS FUL L24

=> fil caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	140.28	651.32

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-7.43

FILE 'CAPLUS' ENTERED AT 11:59:30 ON 09 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 9 Sep 2002 VOL 137 ISS 11
FILE LAST UPDATED: 8 Sep 2002 (20020908/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> s l26
L27 50443 L26

=> s l27 and (peroxide or halogen)
159105 PEROXIDE
37803 PEROXIDES
174663 PEROXIDE
(PEROXIDE OR PEROXIDES)
92775 HALOGEN
17591 HALOGENS
102322 HALOGEN
(HALOGEN OR HALOGENS)
L28 2065 L27 AND (PEROXIDE OR HALOGEN)

```
=> s l28 and fluorocarbon
          12055 FLUOROCARBON
           3750 FLUOROCARBONS
          13705 FLUOROCARBON
                  (FLUOROCARBON OR FLUOROCARBONS)
L29          16 L28 AND FLUOROCARBON

=> d ibib abs hitstr 1-16
```

L29 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:809199 CAPLUS
DOCUMENT NUMBER: 135:318851
TITLE: Method for preparing a fluoropolymer by radical polymerization in an aqueous emulsion
INVENTOR(S): Kappler, Patrick; Pascal, Thierry; Wille, Roice; Brulet, Daniel
PATENT ASSIGNEE(S): Atofina, Fr.
SOURCE: Fr. Demande, 16 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2804438	A1	20010803	FR 2000-1191	20000131

OTHER SOURCE(S): MARPAT 135:318851

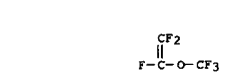
AB Polymers based on vinylidene fluoride and, optionally, other fluoromonomers, with improved yellowing resistance and decreased fluorocarbon emission are manufd. by radical, emulsion polymn. in the presence of CnF2n+1CO2Li (I, n = 6-12) surfactant, ROCOOCO2R or ROOR (R = Et, Pr, iso-Pr, tert-Bu, or tert-amyl) initiator, chain-transfer agent selected from iso-PrOH, AcOMe, AcOEt, AcOBu, di-Et malonate, and di-Et carbonate, and, optionally, a paraffin with m.p. 40-70.degree.; and washing the coagulated emulsion with water until the I content is .ltoreq.200 ppm.

IT **35064-83-6P**, Perfluoro(methyl vinyl ether)-vinylidene fluoride copolymer
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepg. fluoropolymers by radical polymn. in aq. emulsions)

RN 35064-83-6 CAPLUS
CN Ethene, trifluoro(trifluoromethoxy)-, polymer with 1,1-difluoroethene (9CI) (CA INDEX NAME)

CM 1

CRN 1187-93-5
CMF C3 F6 O



CM 2

CRN 75-38-7
CMF C2 H2 F2

L29 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)

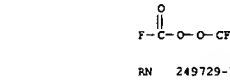
L29 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:534597 CAPLUS
DOCUMENT NUMBER: 131:336721
TITLE: The reaction of difluorodioxirane with cesium trifluoromethoxide
AUTHOR(S): Huang, Qun; DesMarteau, Darryl D.
CORPORATE SOURCE: Department of Chemistry, Clemson University, Clemson, SC, USA
SOURCE: Chemical Communications (Cambridge) (1999), (17), 1671-1672
CODEN: CHCOFS; ISSN: 1359-7345
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 131:336721

AB The reaction of difluorodioxirane with cesium trifluoromethoxide in the presence of CsF forms CF3OOC(O)F and the new compds. CF3O(OCF2O)nOC(O)F (n = 1 3); 13C labeling shows that the dioxirane undergoes ring opening at the O-O bond.

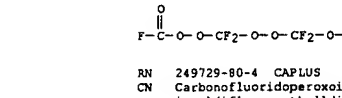
IT **16118-40-4P 249729-77-9P 249729-78-0P 249729-80-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(reaction of difluorodioxirane with carbonyl difluoride in presence of cesium fluoride)

RN 16118-40-4 CAPLUS
CN Carbonofluoridoperoxoic acid, trifluoromethyl ester (9CI) (CA INDEX NAME)

RN 249729-77-9 CAPLUS
CN Carbonofluoridoperoxoic acid, difluoro[(trifluoromethyl)dioxy]methyl ester (9CI) (CA INDEX NAME)

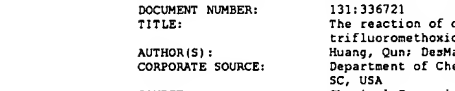


RN 249729-78-0 CAPLUS
CN Carbonofluoridoperoxoic acid, [[difluoro[(trifluoromethyl)dioxy]methyl]dioxy]difluoromethyl ester (9CI) (CA INDEX NAME)



RN 249729-80-4 CAPLUS
CN Carbonofluoridoperoxoic acid, [[[[difluoro[(trifluoromethyl)dioxy]methyl]dioxy]difluoromethyl]dioxy]difluoromethyl ester (9CI) (CA INDEX NAME)

L29 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:286376 CAPLUS
DOCUMENT NUMBER: 126:264472
TITLE: Manufacture of acyl **peroxides**
INVENTOR(S): Diffendall, George Francis; Harding, Thomas William; Hockman, Joseph Norman; Targett, Matthew John; Wheland, Robert Clayton; Krespan, Carl George
PATENT ASSIGNEE(S): E.I. Du Pont De Nemours and Company, USA
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

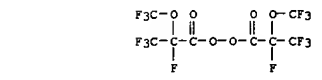
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9708142	A1	19970306	WO 1996-US13976	19960830
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5831131	A	19981103	US 1996-703232	19960826
CA 2230606	AA	19970306	CA 1996-2230606	19960830
EP 847387	A1	19980617	EP 1996-931442	19960830
EP 847387	B1	20020102		
R: DE				
JP 11511464	T2	19991005	JP 1996-510595	19960830
US 5962746	A	19991005	US 1998-128506	19980804

PRIORITY APPLN. INFO.: US 1995-2961P P 19950830
US 1996-703232 A 19960826
WO 1996-US13976 W 19960830

AB A process for the faster manufg. of hydrocarbon, **fluorocarbon** and chlorocarbon acyl **peroxides**, useful as polymn. initiators and in org. synthesis, is disclosed wherein a metal or tetraalkylammonium hydroxide, a **peroxide** and an acyl halide are reacted under continuous vigorous agitation conditions so as to bring the reaction to substantial completion in less than one minute.

IT **90275-06-2P**
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(manuf. of acyl **peroxides** for polymn. catalysts by reaction of acyl halides, hydroxides, **peroxides** under vigorous agitation)

RN 90275-06-2 CAPLUS
CN Peroxide, bis[2,3,3,3-tetrafluoro-1-oxo-2-(trifluoromethoxy)propyl] (9CI) (CA INDEX NAME)



IT **2927-83-5**
RL: RCT (Reactant); RACT (Reactant or reagent)

L29 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)
(manuf. of acyl **peroxides** for polymn. catalysts by reaction of acyl halides, hydroxides, **peroxides** under vigorous agitation)

RN 2927-83-5 CAPLUS
CN Propanoyl fluoride, 2,3,3,3-tetrafluoro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

L29 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:71567 CAPLUS
DOCUMENT NUMBER: 124:178664
TITLE: **Fluorocarbon** rubbers modified by silicone resins
INVENTOR(S): Gentle, Thomas M.; Gornowicz, Gerald A.
PATENT ASSIGNEE(S): Dow Corning Corporation, USA
SOURCE: U.S., 11 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5480930	A	19960102	US 1994-292305	19940818
EP 697437	A1	19960221	EP 1995-305600	19950811
EP 697437	B1	20020102		
R: DE, FR, GB				
JP 08170001	A2	19960702	JP 1995-210786	19950818

PRIORITY APPLN. INFO.: US 1994-292305 A 19940818

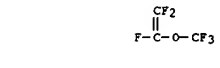
AB Cured fluororubber compns., having high mech. strength, low-temp. flexibility, and solvent resistance and low fuel permeability, comprise fluororubbers with a Mooney viscosity of 5-160 50-95, amorphous silicone resins (degree of substitution 0.9-1.8) 5-50, and optionally polydiorganosiloxane gums or rubbers 0-40%. A compn. of Tecnoflon P 419 100, OH-contg. Me3SiO1/2/SiO2-based siloxane 30, CaCO3 8.5, triallyisocyanurate 2.2, and a **peroxide** 2.4 part was vulcanized to form a product with tensile strength 9.86 MPa, elongation 310%, 10% retraction (ASTM 1329-88) -7.degree. and -25.degree. in dry and ref. fuel C (RFC) condition, resp., and vol swelling 8% in RFC at 40.degree. for 1 wk.

IT **56357-87-0**, Tetrafluoroethylene-trifluoromethyl trifluorovinyl ether-vinylidene fluoride copolymer
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(rubber; siloxane resin-contg. fluororubber compns. with low fuel permeability and good cold resistance)

RN 56357-87-0 CAPLUS
CN Ethene, tetrafluoro-, polymer with 1,1-difluoroethene and trifluoro(trifluoromethoxy)ethene (9CI) (CA INDEX NAME)

CM 1

CRN 1187-93-5
CMF C3 F6 O



CM 2

CRN 116-14-3
CMF C2 F4

L29 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)

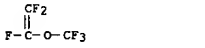
CM 3

CRN 75-38-7
CMF C2 H2 F2

L29 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:362702 CAPLUS
DOCUMENT NUMBER: 122:239348
TITLE: Cyclofluoroalkylated fullerene compounds
INVENTOR(S): Bekiarian, Paul G.; Fagan, Paul J.; Krusic, Paul J.
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5382718	A	19950117	US 1993-122118	19930916
US 5416243	A	19950516	US 1994-297334	19940829
WO 9507875	A1	19950323	WO 1994-US10103	19940915

W: CA, JP
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
PRIORITY APPLN. INFO.: US 1993-122118 19930916
OTHER SOURCE(S): MARPAT 122:239348
AB Mixts. of cyclofluoroalkylated fullerenes are provided by the thermal [2 + 2] cycloaddn. of fluoroalkenes to a soln. or slurry of a fullerene. The cyclofluoroalkylated fullerene mixts. are useful as lubricants or additives to lubricants; in **fluorocarbon** and/or chlorofluorocarbon based cooling systems; in adhesives for **fluorocarbon** based polymers and in gas sepn. membranes (no data).
IT **1187-93-5DP**, Perfluoro(methyl vinyl ether), reaction products with fullerene
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of cyclofluoroalkylated fullerene mixts. via thermal [2+2] cycloaddn. reaction of fullerenes with fluoroalkenes)
RN 1187-93-5 CAPLUS
CN Ethene, trifluoro(trifluoromethoxy)- (9CI) (CA INDEX NAME)



L29 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:316220 CAPLUS
DOCUMENT NUMBER: 123:45714
TITLE: Dry etching of silicon compound layers
INVENTOR(S): Yanagida, Toshiharu
PATENT ASSIGNEE(S): Sony Corp., Japan
SOURCE: U.S., 8 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5376234	A	19941227	US 1993-78928	19930621
JP 3109253	B2	20001113	JP 1992-170980	19920629

PRIORITY APPLN. INFO.: JP 1992-170980 A 19920629
AB A mercaptan, a thioether, and/or a disulfide having a **fluorocarbon** side chain is used as a main component of the etching gas. These compds. may form CFx+ and S on dissocn. due to elec. discharges, and contribute to high-rate etching and surface protection of a wafer. If a **halogen** compd. such as COF2, SOF2, or NOF is added to the etching gas, a high-rate etching reaction due to extn. of O atoms from SiO2 and structural reinforcement of carbonaceous polymer become possible. Also, S2F2 may be added for reinforcing deposition of S. These effects lead to a redn. of the amt. of deposited polymer necessary for highly selective processing, and contribute greatly to low pollution in a process.
IT **372-64-5**, Bis(trifluoromethyl)disulfide
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(plasma etching of silicon compd. layers in gas mixts. contg.)
RN 372-64-5 CAPLUS
CN Disulfide, bis(trifluoromethyl) (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

L29 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:513758 CAPLUS
DOCUMENT NUMBER: 117:113758
TITLE: Solid materials with reduced surface energy and surface treatment for obtaining the same
INVENTOR(S): Tadenuma, Katsuyoshi; Kawamura, Fumiaki
PATENT ASSIGNEE(S): Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04048075	A2	19920218	JP 1990-158500	19900615
JP 2986513	B2	19991206		

AB The title materials have **fluorocarbon** groups chem. bonded on the surface. Treatment of glass and ceramics with Freon 12 and Freon 13 with .gamma.-ray or microwave irradn. was esp. effective for reduced surface energy (increased water contact angle).
IT **927-84-4**, Bis(trifluoromethyl) **peroxide**
RL: USES (Uses)
(solids surface energy redn. by surface treatment with)
RN 927-84-4 CAPLUS
CN Peroxide, bis(trifluoromethyl) (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

L29 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:582630 CAPLUS
DOCUMENT NUMBER: 115:182630
TITLE: **Fluorocarbon** compounds and processes for preparation thereof
INVENTOR(S): Krespan, Carl George
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9109010	A2	19910627	WO 1990-US7114	19901210
WO 9109010	A3	19910905		

W: CA, JP
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE

US 5101058	A	19920331	US 1989-448651	19891211
CA 2071199	AA	19910612	CA 1990-2071199	19901210
EP 504285	A1	19920923	EP 1991-901382	19901210
EP 504285	B1	19941012		

R: DE, FR, GB, IT

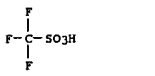
JP 05502866	T2	19930520	JP 1991-501767	19901210
JP 3172173	B2	20010604		
JP 2000053665	A2	20000222	JP 1999-201502	19901210
US 5185477	A	19930209	US 1991-803441	19911206
JP 2000053604	A2	20000222	JP 1999-201485	19990715
JP 3130303	B2	20010131		

PRIORITY APPLN. INFO.: US 1989-448651 A 19891211
JP 1991-501767 A3 19901210
WO 1990-US7114 W 19901210
OTHER SOURCE(S): MARPAT 115:182630
GI

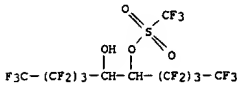
I

AB Fluorinated (poly)sulfonates and halosulfonates R2R3FCCHXCHR1(OSO2)nZ (R1 = H, CFR2R3; R2, R3 = F, perfluoroalkyl; R1 = H, CFR2R3; X = Cl, Br, iodo; Z = Cl, Br, OCHR1CHXCFR2R3; n = 1-6), halohydrins R2R3CHXCH(OH)CFR2R3, and epoxides (I), useful as monomers and chem. intermediates, are prepd. by reacting (perfluoroalkyl)ethylenes R2R3FCCH:CHR1 with SO3 and a **halogen**, i.e. Cl, Br or iodine, in the optional presence of a solvent, and further reacting the products. Thus, 0.13 mol CF3(CF2)3CH:CH2 was added to 0.12 mol SO3 with stirring at 25.degree. followed by 0.12 mol I, whereupon an exotherm carried to 45.degree. and then abated. The mixt. was stirred overnight at 25.degree. and then at 50.degree. for 30 min, evapd. in vacuo at 0.15 mmHg, stirred with H2O, filtered and air-dried to give 58% (based on SO3) [CF3(CF2)3CHICH2O]2SO2.
IT **1493-13-6**, Trifluoromethanesulfonic acid
RL: RCT (Reactant)
(addn. reaction of, with bis(perfluorobutyl)ethylene oxide)
RN 1493-13-6 CAPLUS

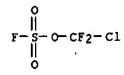
L29 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN Methanesulfonic acid, trifluoro- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



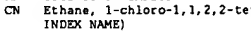
IT **136483-80-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for fluoropolymers)
RN 136483-80-2 CAPLUS
CN Methanesulfonic acid, trifluoro-, 3,3,4,4,5,5,6,6,6-nonafluoro-2-hydroxy-1-(nonafluorobutyl)hexyl ester (9CI) (CA INDEX NAME)



L29 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1980:638741 CAPLUS
DOCUMENT NUMBER: 93:238741
TITLE: **Halogen** fluorosulfate reactions with **fluorocarbons**
AUTHOR(S): Shack, Carl J.; Christe, K. O.
CORPORATE SOURCE: Rocketdyne, Div. Rockwell Int., Canoga Park, CA, 91304, USA
SOURCE: J. Fluorine Chem. (1980), 16(1), 63-73
CODEN: JFLCAR; ISSN: 0022-1139
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The reaction of simple **fluorocarbon** halides with ClOSO2F or its mixts. with BrOSO2F to produce RfOSO2F (Rf = perfluoroalkyl) has been investigated. In many cases even primary chlorine in CF2Cl groups can be replaced by OSO2F. Primary bromine or iodine in CF2X are more readily replaced. The mechanism of this replacement reaction has been established by the isolation of the metastable intermediate RfI(OSO2F)2. Neither secondary chlorine nor bromine in CFX groups is affected. With the secondary iodide (CF3)2CFI, the salt [[(CF3)2CF]2I]+ [I(OSO2F)4-] is formed. Furthermore, ClOSO2F is capable of converting **fluorocarbon** acids or their derivs. into **fluorocarbon** halides. A combination of these two ClOSO2F reactions with the known conversion of RfCF2OSO2F to the corresponding **fluorocarbon** acid offers a novel, high yield chain shortening reaction.
IT **6069-31-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, by reaction of **halogen** fluorosulfate with fluorinated carboxylic acid)
RN 6069-31-4 CAPLUS
CN Fluorosulfuric acid, chlorodifluoromethyl ester (8CI, 9CI) (CA INDEX NAME)



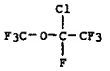
L29 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1976:576764 CAPLUS
DOCUMENT NUMBER: 85:176764
TITLE: Direct synthesis of **fluorocarbon peroxides**. II. The addition of fluoroperoxytrifluoromethane to alkenes
AUTHOR(S): Hohorst, Frederick A.; Desmarteau, Darryl D.
CORPORATE SOURCE: Dep. Chem., Kansas State Univ., Manhattan, Kans., USA
SOURCE: Inorg. Nucl. Chem. - Herbert H. Hyman Mem. Vol. (1976), 63-6. Editor(s): Katz, Joseph J.; Sheft, Irving. Pergamon: Oxford, Engl.
CODEN: 33TZAU
DOCUMENT TYPE: Conference
LANGUAGE: English
AB F3COOF reacted with alkenes, C2H4, C2F3Cl, perfluoropropene, and perfluorocyclopentene, to give the expected **peroxides** which were characterized by ir and NMR. Thus, treatment of C2F3Cl gave F3COCF2CF2Cl, F3COCFClCF3, F3COOCFClCF3, and F3COOCF2CF2Cl.
IT **1561-50-8P 54362-31-1P 59426-77-6P 60901-71-5P 60901-72-6P 60901-73-7P 60901-74-8P 60901-75-9P 60901-76-0P 60901-77-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 1561-50-8 CAPLUS
CN Ethane, 1-chloro-1,1,2,2-tetrafluoro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)



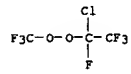
RN 54362-31-1 CAPLUS
CN Peroxide, 2-chloro-1,1,2,2-tetrafluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)

RN 59426-77-6 CAPLUS
CN Propane, 1,1,1,2,2,3,3-heptafluoro-3-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

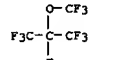
RN 60901-71-5 CAPLUS
CN Ethane, 1-chloro-1,2,2,2-tetrafluoro-1-(trifluoromethoxy)- (9CI) (CA INDEX NAME)



L29 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 60901-72-6 CAPLUS
CN Peroxide, 1-chloro-1,2,2,2-tetrafluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)

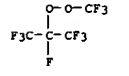


RN 60901-73-7 CAPLUS
CN Peroxide, 2-fluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)

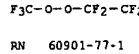


RN 60901-74-8 CAPLUS
CN Propane, 1,1,1,2,3,3,3-heptafluoro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

RN 60901-75-9 CAPLUS
CN Peroxide, 1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl trifluoromethyl (9CI) (CA INDEX NAME)

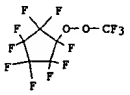


RN 60901-76-0 CAPLUS
CN Peroxide, heptafluoropropyl trifluoromethyl (9CI) (CA INDEX NAME)



RN 60901-77-1 CAPLUS
CN Peroxide, nonafluorocyclopentyl trifluoromethyl (9CI) (CA INDEX NAME)

L29 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)



IT **34511-13-2**
RL: RCT (Reactant)
(reaction of, with alkenes)
RN 34511-13-2 CAPLUS
CN Peroxyhypofluorous acid, trifluoromethyl ester (9CI) (CA INDEX NAME)

$F_3C-O-O-F$

L29 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1975:72506 CAPLUS
DOCUMENT NUMBER: 82:72506
TITLE: Direct synthesis of **fluorocarbon peroxides**. III. Addition of chloroperoxytrifluoromethane to olefins
AUTHOR(S): Walker, Nyal; DesMarteau, Darryl D.
CORPORATE SOURCE: Dep. Chem., Kansas State Univ., Manhattan, Kans., USA
SOURCE: J. Am. Chem. Soc. (1975), 97(1), 13-17
CODEN: JACSAT
DOCUMENT TYPE: Journal
LANGUAGE: English
AB CF3OOCl added to olefins to give trifluoromethyl-peroxy derivs. in high yield. The reactions were unidirectional and proceeded by an electrophilic mechanism, in which the positive chlorine of CF3OOCl adds to the carbon with the greatest no. of hydrogens or the fewest fluorines. Reactions with C2H4, C2F4, C2F3Cl, CF2:CCl2, CF2:CH2, CFH:CHCl, and cis-CFH:-CFH occurred readily >0.degree.; perfluoropropene and perfluoro-cyclopentene were unreactive under all conditions tried. With cis-CFH:CFH, the reaction is stereo-specific.
IT **32755-26-3**
RL: RCT (Reactant)
(addn. reaction with olefins)
RN 32755-26-3 CAPLUS
CN Peroxyhypochlorous acid, trifluoromethyl ester (8CI, 9CI) (CA INDEX NAME)

$F_3C-O-O-Cl$

IT **1561-50-8P 1645-95-0P 25476-71-5P**
25957-33-9P 54362-30-0P 54362-31-1P
54362-32-2P 54362-33-3P 54362-34-4P
54362-35-5P 54362-36-6P 54362-37-7P
54362-38-8P 54362-39-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 1561-50-8 CAPLUS
CN Ethane, 1-chloro-1,1,2,2-tetrafluoro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

$F_3C-O-CF_2-CF_2-Cl$

RN 1645-95-0 CAPLUS
CN Ethane, 1-chloro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

$F_3C-O-CH_2-CH_2Cl$

RN 25476-71-5 CAPLUS
CN Ethane, 1,1-dichloro-1,2,2-trifluoro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

L29 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)

$F_3C-O-CF_2-CCl_2-F$

RN 25957-33-9 CAPLUS
CN Ethane, 2-chloro-1,1-difluoro-1-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

$F_3C-O-CF_2-CH_2Cl$

RN 54362-30-0 CAPLUS
CN Peroxide, 2-chloroethyl trifluoromethyl (9CI) (CA INDEX NAME)

$F_3C-O-O-CH_2-CH_2Cl$

RN 54362-31-1 CAPLUS
CN Peroxide, 2-chloro-1,1,2,2-tetrafluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)

$F_3C-O-O-CF_2-CF_2-Cl$

RN 54362-32-2 CAPLUS
CN Peroxide, 2,2-dichloro-1,1,2-trifluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)

$F_3C-O-O-CF_2-CCl_2-F$

RN 54362-33-3 CAPLUS
CN Peroxide, 2,2,2-trichloro-1,1-difluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)

$F_3C-O-O-CF_2-CCl_3$

RN 54362-34-4 CAPLUS
CN Ethane, 1,1,1-trichloro-2,2-difluoro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

$F_3C-O-CF_2-CCl_3$

RN 54362-35-5 CAPLUS
CN Peroxide, 2-chloro-1,1-difluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)

$F_3C-O-O-CF_2-CH_2Cl$

RN 54362-36-6 CAPLUS

L29 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN Peroxide, 2,2-dichloro-1-fluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)

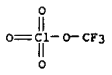
RN 54362-37-7 CAPLUS
CN Ethane, 1,1-dichloro-2-fluoro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

RN 54362-38-8 CAPLUS
CN Peroxide, 2-chloro-1,2-difluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)

RN 54362-39-9 CAPLUS
CN Ethane, 1-chloro-1,2-difluoro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

IT **16118-40-4**
RL: RCT (Reactant)
(reaction of, with chlorine fluoride)
RN 16118-40-4 CAPLUS
CN Carbonofluoridoperoxoic acid, trifluoromethyl ester (9CI) (CA INDEX NAME)

L29 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1975:50798 CAPLUS
DOCUMENT NUMBER: 82:50798
TITLE: **Halogen** perchlorates. Reactions with **fluorocarbon** halides
AUTHOR(S): Schack, Carl J.; Pilipovich, Don; Christe, Karl O.
CORPORATE SOURCE: Rocketdyne Div., Rockwell Int., Canoga Park, Calif., USA
SOURCE: Inorg. Chem. (1975), 14(1), 145-51
CODEN: INOCAJ
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The reactions of XClO4 (X = Cl, Br) with numerous fluoroalkyl halides were exam. For **fluorocarbon** iodides, these reactions generally produced high yields of the novel **fluorocarbon** perchlorates CF3ClO4, CF3CF2ClO4, n-C7F15ClO4, O4ClCF2CF2ClO4, and ICF2CF2ClO4. Important insight into the mechanism of formation of these compds. was obtained through the isolation of complex intermediates such as (CF3)2CFI(ClO4)2 and n-C7F15I(ClO4)2. Based on their vibrational spectra, these intermediates have the ionic structure [(Rf)2I]+[I(ClO4)4]-. **Fluorocarbon** bromides reacted less readily but sometimes did produce perchlorate derivs. such as (O4ClCF2CFBr)2, CF3CFBrCF2ClO4, and BrCF2CF2ClO4. Neither mono nor di, primary nor secondary Cl contained in satd. RfCl materials interacted with these **halogen** perchlorates. These and other related reactions are discussed and characteristic data are given for this new and interesting class of compds.
IT **52003-45-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 52003-45-9 CAPLUS
CN Perchloric acid, trifluoromethyl ester (9CI) (CA INDEX NAME)

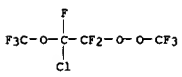


L29 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1974:403295 CAPLUS
DOCUMENT NUMBER: 81:3295
TITLE: Direct synthesis of **fluorocarbon peroxides**. I. Addition of bis(trifluoromethyl) trioxide to selected carbon-carbon multiple bonds
AUTHOR(S): Hohorst, Frederick A.; Paukstelis, Joseph V.; DesMarteau, Darryl D.
CORPORATE SOURCE: Dep. Chem., Kansas State Univ., Manhattan, Kans., USA
SOURCE: J. Org. Chem. (1974), 39(9), 1298-1302
CODEN: JOCEAH
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The addn. of bis(trifluoromethyl) trioxide, CF3OOOCF3, to a variety of C-C multiple bonds is reported. With ethylene, tetrafluoroethylene, chlorotrifluoroethylene, hexafluoropropylene, perfluorobutene-2, and perfluorocyclopentene the usual products are CF3OOCRR1CR2R3OCF3 and CF3OCRR1CR2R3OOCF3. These products form in 50-80% yield with alkenes which are not prone to radical polymn. In the case of tetrafluoroethylene and chlorotrifluoroethylene, addnl. products contg. two mol. of alkene are obsd. as well as several trifluoromethyl ethers. The proposed reaction mechanism of initial addn. of CF3O. bul. to the alkene is consistent with the obsd. products.
IT **1718-18-9**
RL: RCT (Reactant)
(addn. reaction of, with alkenes)
RN 1718-18-9 CAPLUS
CN Trioxide, bis(trifluoromethyl) (8CI, 9CI) (CA INDEX NAME)

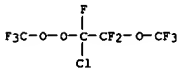
IT **39479-36-2P 42028-65-9P 42028-66-0P**
50921-20-5P 50921-48-7P 50921-49-8P
50921-50-1P 50921-51-2P 50921-52-3P
50921-53-4P 50921-54-5P 50921-55-6P
50921-57-8P 50921-74-9P 50921-75-0P
50921-76-1P 50921-77-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 39479-36-2 CAPLUS
CN Butane, 1,1,2,2,3,3,4,4-octafluoro-1,4-bis(trifluoromethoxy)- (9CI) (CA INDEX NAME)

RN 42028-65-9 CAPLUS
CN Peroxide, 2-chloro-1,1,2-trifluoro-2-(trifluoromethoxy)ethyl trifluoromethyl (9CI) (CA INDEX NAME)

L29 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)



RN 42028-66-0 CAPLUS
CN Peroxide, 1-chloro-1,2,2-trifluoro-2-(trifluoromethoxy)ethyl trifluoromethyl (9CI) (CA INDEX NAME)



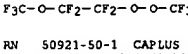
RN 50921-20-5 CAPLUS
CN Butane, dichlorohexafluoro-1,4-bis(trifluoromethoxy)- (9CI) (CA INDEX NAME)

2 (D1-Cl)

6 (D1-F)

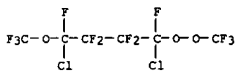
RN 50921-48-7 CAPLUS
CN Peroxide, 2-(trifluoromethoxy)ethyl trifluoromethyl (9CI) (CA INDEX NAME)

RN 50921-49-8 CAPLUS
CN Peroxide, 1,1,2,2-tetrafluoro-2-(trifluoromethoxy)ethyl trifluoromethyl (9CI) (CA INDEX NAME)

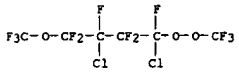


RN 50921-50-1 CAPLUS
CN Peroxide, 1,4-dichloro-1,2,2,3,3,4-hexafluoro-4-(trifluoromethoxy)butyl trifluoromethyl (9CI) (CA INDEX NAME)

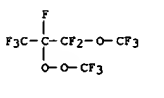
L29 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)



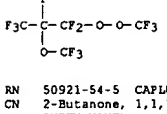
RN 50921-51-2 CAPLUS
CN Peroxide, 1,3-dichloro-1,2,2,3,4,4-hexafluoro-4-(trifluoromethoxy)butyl trifluoromethyl (9CI) (CA INDEX NAME)



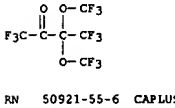
RN 50921-52-3 CAPLUS
CN Peroxide, 1-[difluoro(trifluoromethoxy)methyl]-1,2,2,2-tetrafluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)



RN 50921-53-4 CAPLUS
CN Peroxide, 1,1,2,3,3,3-hexafluoro-2-(trifluoromethoxy)propyl trifluoromethyl (9CI) (CA INDEX NAME)

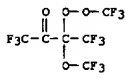


RN 50921-54-5 CAPLUS
CN 2-Butanone, 1,1,1,4,4,4-hexafluoro-3,3-bis(trifluoromethoxy)- (9CI) (CA INDEX NAME)



RN 50921-55-6 CAPLUS
CN 2-Butanone, 1,1,1,4,4,4-hexafluoro-3-(trifluoromethoxy)-3-[(trifluoromethyl)dioxy]- (9CI) (CA INDEX NAME)

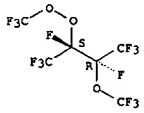
L29 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)



RN 50921-57-8 CAPLUS
CN Peroxide, 1,1,2,2,3,3,4,4-octafluoro-4-(trifluoromethoxy)ethyl trifluoromethyl (9CI) (CA INDEX NAME)

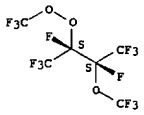
RN 50921-74-9 CAPLUS
CN Peroxide, 1,2,3,3,3-pentafluoro-2-(trifluoromethoxy)-1-(trifluoromethyl)ethyl trifluoromethyl, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



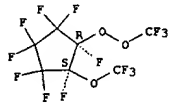
RN 50921-75-0 CAPLUS
CN Peroxide, 1,2,3,3,3-pentafluoro-2-(trifluoromethoxy)-1-(trifluoromethyl)ethyl trifluoromethyl, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



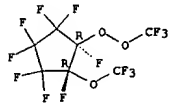
RN 50921-76-1 CAPLUS
CN Peroxide, 1,2,2,3,3,4,4,5-octafluoro-5-(trifluoromethoxy)cyclopentyl trifluoromethyl, cis- (9CI) (CA INDEX NAME)

L29 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)
Relative stereochemistry.

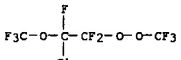


RN 50921-77-2 CAPLUS
CN Peroxide, 1,2,2,3,3,4,4,5-octafluoro-5-(trifluoromethoxy)cyclopentyl trifluoromethyl, trans- (9CI) (CA INDEX NAME)

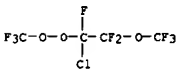
Relative stereochemistry.



L29 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1973:478017 CAPLUS
DOCUMENT NUMBER: 79:78017
TITLE: Direct synthesis of **fluorocarbon peroxides**. Addition of bis(trifluoromethyl) trioxide to chlorotrifluoroethylene
AUTHOR(S): Hohorst, Frederick A.; DesMarteau, Darryl D.
CORPORATE SOURCE: Dep. Chem., Kans. State Univ., Manhattan, Kans., USA
SOURCE: J. Chem. Soc., Chem. Commun. (1973), (12), 110873
CODEN: JCCCAT
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Addn. of CF3OOOCF3 to F2C:CFCl at 70.degree. gave a mixt. contg. CF3OOCF2CFClOCF3 and CF3OCF2CFClOOCF3. The structures were confirmed by 19F NMR.
IT **42028-65-9P 42028-66-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 42028-65-9 CAPLUS
CN Peroxide, 2-chloro-1,1,2-trifluoro-2-(trifluoromethoxy)ethyl trifluoromethyl (9CI) (CA INDEX NAME)



RN 42028-66-0 CAPLUS
CN Peroxide, 1-chloro-1,2,2-trifluoro-2-(trifluoromethoxy)ethyl trifluoromethyl (9CI) (CA INDEX NAME)

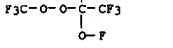


IT **1718-18-9**
RL: RCT (Reactant)
(reaction of, with chlorotrifluoroethylene)
RN 1718-18-9 CAPLUS
CN Trioxide, bis(trifluoromethyl) (8CI, 9CI) (CA INDEX NAME)

L29 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1969:67606 CAPLUS
DOCUMENT NUMBER: 70:67606
TITLE: Perfluoroalkylperoxy perfluoroalkylfluoroxy compounds
INVENTOR(S): Prager, Julianne H.; Thompson, Phillip G.
PATENT ASSIGNEE(S): Minnesota Mining and Manufg. Co.
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

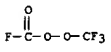
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3420866	A	19690107	US 1966-614375	19661212

AB CF3CO2NO (1 g.) in a stainless steel tray was placed in a 450-ml. Cu vessel, the vessel cooled to -20.degree. and flushed with N, and the contents treated with 3% F in N at 0.02 ft.3/min. 7 hrs. The off gases were passed through a trap immersed in liq. air; the contents of the trap fractionated through traps at -78.degree., -119.degree., and -196.degree.; and the contents of the -196.degree. traps sepd. by gas chromatog. to give 16% C2F5OF (I). Similarly were prepd. (compd. fluorinated and products given): (CF3)2C(OH)2 (II), (CF3)2CFOF (III); CF3CO2Na (IV), 23% I, 18% CF3CF(OF)2 (V), and F2C(OF)2 (VI); IV, I, V, VI, C2F5OOCF2OF, CF3OOCF2OF, C2F5OOCF(OF)CF3, CF3OOCF(OF)CF3, and [CF3CF(OF)]2O2; (EtO)4C, I; (CF3)3CONa, (CF3)3COF; C5F11CO2Na, perfluorohexyloxyfluorides; ClCF2CO2Na, ClCF2CF2OF; II Na salt, IV, (CF3)2C(OF)2, I, and V. Other F-contg. compds. gave similar OF derivs.
IT **16156-37-9P 22410-16-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 16156-37-9 CAPLUS
CN Hypofluorous acid, difluoro[(trifluoromethyl)dioxy]methyl ester (9CI) (CA INDEX NAME)

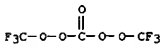


RN 22410-16-8 CAPLUS
CN Ethanol, tetrafluoro-1-[(trifluoromethyl)dioxy]-, hypofluorite (8CI) (CA INDEX NAME)

L29 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1968:402462 CAPLUS
DOCUMENT NUMBER: 69:2462
TITLE: **Fluorocarbon peroxides.** Novel **peroxides** prepared from bis(fluoroformyl) **peroxide**
AUTHOR(S): Talbott, Richard L.
CORPORATE SOURCE: Minnesota Mining and Mfg. Co., Saint Paul, Minn., USA
SOURCE: J. Org. Chem. (1968), 33(5), 2095-9
CODEN: JOCEAH
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The photodecompn. of bis(fluoroformyl) **peroxide** in a quartz app. gives fragments trapped with difluorodiazirine to give fluoroformyl perfluoromethyl **peroxide** (I). Hydrolysis of I affords either bis(perfluoromethyl) bis(peroxy)carbonate or perfluoromethyl hydroperoxide, depending on the reaction conditions. Fluorination of fluoroformyl perfluoromethyl **peroxide** and bis(perfluoromethyl) bis(peroxy)carbonate provides the corresponding fluoroxy compds. in high yields. The **peroxides** prepd. are stable in the dark at room temp. 18 references.
IT **16118-40-4P 16156-35-7P 16156-36-8P 16156-37-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 16118-40-4 CAPLUS
CN Carbonofluoridoperoxoic acid, trifluoromethyl ester (9CI) (CA INDEX NAME)



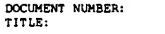
RN 16156-35-7 CAPLUS
CN Carbonodiperoxoic acid, bis(trifluoromethyl) ester (9CI) (CA INDEX NAME)



RN 16156-36-8 CAPLUS
CN Hydroperoxide, trifluoromethyl (8CI, 9CI) (CA INDEX NAME)

RN 16156-37-9 CAPLUS
CN Hypofluorous acid, difluoro[(trifluoromethyl)dioxy]methyl ester (9CI) (CA INDEX NAME)

L29 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)



=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	76.29	727.61

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-9.91	-17.34

STN INTERNATIONAL LOGOFF AT 12:01:20 ON 09 SEP 2002

PALM INTRANET

Day : Monday
Date: 9/9/2002
Time: 12:08:12

Inventor Name Search Result

Your Search was:

Last Name = JANIN
First Name = ROBERT

Application#	Patent#	Status	Date Filed	Title	Inventor Name
08608519	6316636	150	02/28/1996	SYNTHESIS OF FLUOROCARBON COMPOUNDS	JANIN , ROBERT
09961347	Not Issued	071	09/25/2001	SYNTHESIS OF FLUOROCARBON COMPOUNDS	JANIN, ROBERT

Inventor Search Completed: No Records to Display.

Search Another: Inventor **Last Name** JANIN **First Name** ROBERT Search

To go back use Back button on your browser toolbar.

Back to PALM | ASSIGNMENT | OASIS | Home page

PALM INTRANET

Day : Monday
Date: 9/9/2002
Time: 12:13:00

Inventor Name Search Result

Your Search was:

Last Name = SAINT-JALMES
First Name = LAURENT

Application#	Patent#	Status	Date Filed	Title	Inventor Name
09171990	6201149	150	01/19/1999	ORGANIC BASE HYDROGENOFLUOROSULPHONATES, THEIR USE IN RELEASING ORGANIC BASES FROM THEIR FLUOROHYDRATE, METHOD OF PREPARATION THEREOF, COMPOUND CONTAINING THEM	SAINT-JALMES , LAURENT
09180598	6166271	150	01/19/1999	METHOD FOR SYNTHESIS OF HYDROCARBON COMPOUNDS CONTAINING FLUORINE ON AT LEAST ONE ALKYL CHAIN CARBON	SAINT-JALMES , LAURENT
09012232	Not Issued	161	01/23/1998	REAGENT AND PROCESS WHICH ARE USEFUL FOR GRAFTING A SUBSTITUTED DIFLUOROMETHYL GROUP ONTO A COMPOUND CONTAINING AT LEAST ONE ELECTROPHILIC FUNCTION	SAINT-JALMES , LAURENT
09230761	6203670	150	04/06/1999	METHOD FOR GRAFTING A SUBSTITUTED DIFLUOROMETHYL GROUP	SAINT-JALMES , LAURENT
08620359	5859288	150	03/22/1996	REAGENT AND PROCESS FOR THE SYNTHESIS OF OXYSULPHIDE-CONTAINING FLUORINE-CONTAINING ORGANIC DERIVATIVES	SAINT-JALMES , LAURENT
08620348	5756849	150	03/22/1996	REAGENT AND PROCESS WHICH ARE USEFUL FOR GRAFTING A SUBSTITUTED DIFLUOROMETHYL GROUP ONTO A COMPOUND CONTAINING AT LEAST ONE ELECTROPHILIC FUNCTION	SAINT-JALMES , LAURENT
08608519	6316636	150	02/28/1996	SYNTHESIS OF FLUOROCARBON COMPOUNDS	SAINT-JALMES , LAURENT

09201854	Not Issued	094	12/01/1998	REAGENT AND PROCESS WHICH ARE USEFUL FOR GRAFTING A SUBSTITUTED DIFLUOROMETHYL GROUP ONTO A COMPOUND CONTAINING AT LEAST ONE ELECTROPHILIC FUNCTION	SAINT-JALMES , LAURENT
09308257	6203721	150	07/19/1999	COMPOUNDS USEFUL FOR PERHALOGENOALKYLATION, REAGENT FOR IMPLEMENTING THESE COMPOUNDS AND SYNTHESIS METHOD FOR OBTAINING THESE COMPOUNDS	SAINT-JALMES , LAURENT
09609216	Not Issued	061	07/05/2000	EXCHANGE AND TO THE RELEASE OF AN AMINE FROM ITS CARBAMOYL FLUORIDE	SAINT-JALMES, LAURENT
10019694	Not Issued	030	05/03/2002	METHOD FOR DEHYDROGENOFLUORINATION OF AN AROMATIC CARBAMOYL FLUORIDE	SAINT-JALMES, LAURENT
09937856	Not Issued	030	01/10/2002	METHOD FOR ACTIVATING MINERAL FLUORIDE IN AN ORGANIC MEDIUM	SAINT-JALMES, LAURENT
09937853	Not Issued	020	01/10/2002	METHOD FOR ACTIVATING AROMATIC SUBSTRATES BY MICROWAVES	SAINT-JALMES, LAURENT
09961347	Not Issued	071	09/25/2001	SYNTHESIS OF FLUOROCARBON COMPOUNDS	SAINT-JALMES, LAURENT
09786665	Not Issued	093	03/07/2001	METHOD FOR CONDENSATION OF AROMATIC DERIVATIVE(S) AND A SULPHINIC DERIVATIVE	SAINT-JALMES, LAURENT
09768604	6388126	150	01/25/2001	ORGANIC BASE HYDROGENOFLUOROSULPHONATES, THEIR USE IN RELEASING ORGANIC BASES FROM THEIR FLUOROHYDRATE, METHOD OF PREPARATION THEREOF, COMPOUND CONTAINING THEM	SAINT-JALMES, LAURENT

Inventor Search Completed: No Records to Display.

Search Another: Inventor **Last Name** SAINT-JALMES **First Name** LAURENT Search

To go back use Back button on your browser toolbar.

Back to PALM | ASSIGNMENT | OASIS | Home page